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SALARY TRENDS
IN
CANADIAN INDUSTRY
1977 TO 1982

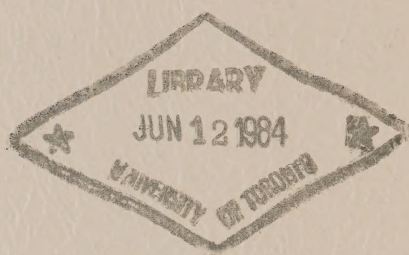


PAY RESEARCH BUREAU

Public Service Staff Relations Board

CANADA





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SALARY TRENDS IN CANADIAN INDUSTRY 1977 TO 1982



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CANADA



Cette publication existe également en français.

Reference: 81-84

.....ABOUT THE PAY RESEARCH BUREAU

PURPOSE

The Pay Research Bureau, Public Service Staff Relations Board, is located in Ottawa. Its primary mandate is:

- 1) To obtain objective information on rates of pay, employee earnings, conditions of employment and related practices prevailing both inside and outside the Public Service of Canada for the benefit of employers and, where there exists a collective bargaining relationship, to certified bargaining agents under the Public Service Staff Relations Act.
- 2) To develop and maintain a fund of up-to-date data and to conduct research studies to support the processes of collective bargaining in the Public Service of Canada. Bureau research and compensation findings are also made available at their request to conciliators and mediators of the Public Service Staff Relations Board and are also tabled as exhibits by the parties at interest arbitration.
- 3) To provide information on compensation and related matters in the Public Service of Canada to industry, provincial and municipal governments and other interested organizations when in the public interest.

BACKGROUND AND METHODOLOGY

Based on the concept of comparable rates for similar work performed inside and outside the Public Service, the Pay Research Bureau became operative on September 1, 1957, to collect data on rates of pay and working conditions essentially for positions in industrial organizations comparable to those in the Public Service of Canada.

The Bureau is now required to provide salary and working conditions information for some 75 occupational groups spread among the six occupational categories into which Public Service employees are classified. It undertakes salary surveys of scientific, professional, technical, administrative, office and operational personnel, as well as comprehensive employee benefit surveys. Each major survey covers, on average, approximately 200 organizations. In addition, special studies of individual occupations or specific conditions of employment, policies or practices may be conducted.

The Bureau endeavours at all times to utilize the most efficient survey methods and to this end has introduced automated systems for the processing of survey data with the capability of producing high quality and timely information.

Data are normally collected on the basis of personal interviews with officials of participating organizations. This usually involves job evaluation or detailed matching of job duties and responsibilities.

During the period of application of the Public Sector Compensation Restraint Act, the survey and special studies program of the Pay Research Bureau will continue unabated in order to permit the monitoring of pay, benefits and conditions of employment aggregate patterns in Canadian industry generally, and also to ensure adequate availability of survey data as Public Service groups of employees exit from the PSCRA, starting in 1984.

PUBLICATION CRITERIA

The confidential data released to the Bureau by survey participants are accessible to only the few officers of the Bureau directly concerned and are published in aggregate form using conventional statistical measures. Rigid adherence to confidentiality criteria has enabled the Bureau over the years to guarantee the maintenance in confidence of the data furnished by individual participants.

RESEARCH ACTIVITIES

A program of basic research in compensation and related subjects is carried on including studies of relevant economic factors. In recent years, much effort has been expended in expanding the scope of the collective agreement analysis manual. This document contains a reference to every clause of every Public Service collective agreement under the Public Service Staff Relations Act. Research work has also been undertaken on developing methods for costing the provisions of collective agreements and on cost benefit analysis. Special research studies are also undertaken on issues flowing from collective bargaining.

For further information regarding the Pay Research Bureau and its activities, address inquiries to:

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SALARY TRENDS IN CANADIAN INDUSTRY

FOREWORD

This report presents salary trends and characteristics in the private sector and other organizations based on surveys covering the period from 1977 to 1982. This is the fifth report of its kind prepared by the Pay Research Bureau. Earlier reports of this type reported on trends from 1958 to 1977.

Most of the Bureau's survey reports receive a very restricted distribution because of our commitment to survey respondents regarding the confidential reporting of survey findings. Our purpose in publishing reports in this series is to meet the research needs of a broader community of users with an interest in employee compensation data.

The use of this report is not restricted. It may be circulated freely within organizations. Contents may be quoted in research papers or articles with the appropriate source identified. The Bureau assumes full responsibility for the quality and accuracy of the contents. However, any interpretations of the information in the report or comparisons with data from other sources are the complete responsibility of the user unless validated by the Bureau.

Data in this report incorporate 24 occupational classes found in the Scientific and Professional, Administrative and Foreign Service, Administrative Support, Technical and Operational categories in the Public Service of Canada. The summarized findings were obtained from the Pay Research Bureau's surveys. For some classes the information is derived from data obtained from the Department of Labour's Annual Wage Rate Survey and Statistics Canada reports.

This study was conducted by staff of the Operations Branch, J.T. Cunningham, Director. The report was prepared by G. Holloway supervised by M. Brown under the direction of C. Bergeron. The assistance of other Bureau staff who contributed to the survey and the publication of the report is appreciated.

March 1984

R.C. Deslauriers,
Director General

SALARY TRENDS IN CANADIAN INDUSTRY

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SALARY TRENDS IN CANADIAN INDUSTRY

PART I. SURVEY METHODS AND SOURCES

The present treatment of reporting of the reports on trends in salary of the industrial sector in the Survey.

The data from sources in this report are extracted from the Survey, which is the only source, from the Survey's analysis of data obtained from the Department of Labour's data base survey and the 1970-71 Survey.

The data are presented in the form of mean values as percentages of mean, percentage changes in mean values, differentials by region, industry and occupation and the mean percentage change in mean values for the years 1970-71 through 1974-75. The mean values for the years 1970-71 through 1974-75 are presented in this report. The mean values for the years 1970-71 through 1974-75 are presented in this report. The mean values for the years 1970-71 through 1974-75 are presented in this report.

SALARY TRENDS IN CANADIAN INDUSTRY

Part I


Survey Methods

and Sources

The data are presented in the form of mean values as percentages of mean, percentage changes in mean values, differentials by region, industry and occupation and the mean percentage change in mean values for the years 1970-71 through 1974-75. The mean values for the years 1970-71 through 1974-75 are presented in this report. The mean values for the years 1970-71 through 1974-75 are presented in this report.

In the past, the Survey has been the only source of information on salary trends in the industrial sector. In this report, the Survey is the only source of information on salary trends in the industrial sector. In this report, the Survey is the only source of information on salary trends in the industrial sector.

- 1. Salary Trends and Characteristics of Industrial and Other Occupations, 1970-71 to 1974-75
- 2. Salary Trends and Characteristics of Industrial and Other Occupations, 1970-71 to 1974-75
- 3. Salary Trends and Characteristics of Industrial and Other Occupations, 1970-71 to 1974-75
- 4. Salary Trends and Characteristics of Industrial and Other Occupations, 1970-71 to 1974-75
- 5. Salary Trends and Characteristics of Industrial and Other Occupations, 1970-71 to 1974-75



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SALARY TRENDS IN CANADIAN INDUSTRY

PART I: SURVEY METHODS AND SOURCES

This report represents an updating of the reports on trends in rates of pay published earlier by the Bureau⁽¹⁾.

The basic data presented in this report are extracted from Pay Research Bureau surveys and, for some classes, from the Bureau's analyses of data obtained from the Department of Labour's Wage Rate Survey and Statistics Canada reports.

The data are presented in the form of mean rates by occupation and level, percentage increases in mean rates, differentials by region, industry and occupation and for some scientific and professional classes mean rates by years from bachelor graduation. Salary data for the years 1977 through 1982 are included in this report for as many classes as possible. This report uses 1977 as a reference year for reporting a five year trend. Annual trends are reported from 1977 to the most recent year where data are available.

Readers should remember that the raison d'être of the Pay Research Bureau is to provide data for compensation determination, not for long-term research purposes. Each time a new job evaluation plan is introduced for a Public Service group the Bureau's survey specifications normally change too, to be consistent with the new plan. For that reason trend data can only be produced for a few classes over an extended period of years.

Classes Studied

Data on classes in the scientific and professional, administrative, technical and administrative support categories, as well as, Labourer, Non-production, and Stationary Engineer are regularly surveyed by the Pay Research Bureau. Also included in this update are data on Carpenter, Maintenance and Electrical Repairer from the Department of Labour's Wage Rate Survey, which is conducted annually effective October 1.

In the past much greater use was made of Department of Labour's survey data. In this report we have used our own survey information instead of Labour's for all Administrative Support (previously called "Office") classes and for one Operational Class. We have also deleted three Operational Classes that appeared in previous reports in this series. In the following listing, we have noted the classes for which the change from Department of Labour's to PRB's data has been made.

-
- (1) "Salary Trends and Characteristics in Industrial and Other Organizations, Canada, 1972 to 1977" (#81-77)
"Salary Trends and Characteristics in Industrial and Other Organizations, Canada, 1967 to 1975" (#75-73)
"Salary Trends and Characteristics in Industrial and Other Organizations, Canada, 1967 to 1972" (#74-25)
"Trends in Rates of Pay in Industrial and Other Organizations in Canada, October 1, 1958 to 1968" (#70-3)

With respect to the Firefighter class, which appeared in previous reports based on Wage Rate Survey data, the Bureau no longer extracts data for this class since we introduced our own mail survey in 1981. Because of that change it was decided not to include data for Firefighters in this report. In summary, the Operational Classes that no longer appear are: Cleaner, Industrial Plant; Firefighter; Meter Reader; and Material Handler, General (formerly "Warehouseman").

Only two classes remain from the Wage Rate Survey: Carpenter, Maintenance and Electrical Repairer. These were retained for this report because it was considered desirable to provide users with some trend data on such specialist trades and PRB does not survey such classes.

Although these changes have an impact on the quantity of long-term trend data included in this report, we believe that the primary emphasis of this series of reports should be to tie together PRB data for research purposes. Researchers can obtain trend data on the omitted Wage Rate Survey classes from Department of Labour.

The class Technical Support (Engineering and Scientific) replaces what were listed as four separate classes in previous reports: Technician, Engineering; Technician, Laboratory; Technologist, Engineering; and Technologist, Scientific.

The following classes are reported in this study with the period of trend coverage shown in brackets:

Scientific and Professional Classes

Architect (1978 - 1982)
Chemist (1977 - 1982)
Economist-Statistician (1977 - 1981)
Engineer (1977 - 1982)
Librarian (1978 - 1982)
Physical Scientist (1977 - 1982)
Research Scientist (1977 - 1982)
University Teacher (1977 - 1981)

Administrative Classes

Computer Systems Administrator (1977 - 1982)
Financial Administrator (1977 - 1982)
Information Officer (1977 - 1982)
Personnel Administrator (1978 - 1981)
Purchasing Agent (1977 - 1982)

Administrative Support Classes

** Clerk (1977 - 1982)
** Data Processor (1977 - 1982)
** Secretary, Stenographer, Typist (1977 - 1982)

Technical Classes

Draftsman (1977 - 1982)
Electronics Technician and Technologist (1977 - 1981)
* Technical Support (Engineering and Scientific)
(1978 - 1982)

Operational Classes

Carpenter, Maintenance (1977 - 1982)
Electrical Repairer (1977 - 1982)
Labourer, Non-Production (1977 - 1982)
** Stationary Engineer (1977 - 1982)

The data for these classes are derived from four survey programs: PRB's Automated Pay Survey Program, Department of Labour's Wage Rate Survey, PRB's Personnel Administrator Survey and PRB's extract of University Teacher salaries from Statistics Canada's data. Each of these surveys is described briefly below.

* Revised survey specifications

** Data, in current report, extracted from Pay Research Bureau surveys. In previous report data were extracted from Department of Labour's Wage Rate Surveys.

The Automated Pay Survey Program

The data on all classes except the Carpenter, Maintenance and the Electrical Repairer are derived from Pay Research Bureau surveys. Of the PRB classes, all except University Teacher and Personnel Administrator are part of our Automated Pay Survey Program.

The Bureau uses a mechanized data processing system to compute and report the pay survey findings for most classes. The data are based on rates of pay and related information for incumbents of positions that have been analysed and determined as being equivalent to one of the levels described in the occupational class survey specifications. Job matches are determined in on-site personal interviews with organization representatives, and are subsequently monitored to ensure their validity.

Organizations participating in the survey are requested to update the data supplied to the Bureau twice a year or soon after each major salary review. All information is updated at least once each calendar year. Data are transmitted on magnetic tape, the preferred method, or on standard eighty-column punched cards or preprinted coding sheets.

The Bureau publishes information for most occupational classes included in the automated pay survey program as of March 1 and/or August 15 in reports for the parties to bargaining in the Federal Public Service and survey participants. In this Salary Trends report we have used August 15th data in each year for all classes that are part of the automated pay survey program, except for Architect and Librarian. In the latter two cases March 1st data have been used because reports are only published at that date each year for these classes.

Members of the Advisory Committee on Pay Research, representing Public Service of Canada employers and certified bargaining agents, participate in the development of the survey program at the planning phase, well in advance of the field survey visits. Consultations include identification of the survey requirements and discussion regarding survey methodology, occupational class specifications, survey questionnaires and the survey samples.

Briefings are conducted to prepare all Compensation Research Officers scheduled to participate in the field work to match jobs and collect information. Each occupational class to be surveyed is studied, and anticipated problems are discussed. Particular emphasis is placed on the presentation, review and discussion of the occupational class survey specifications used for the matching of jobs.

Subsequently Compensation Research Officers personally interview organization representatives, usually compensation and industrial relations specialists, to establish new job matches and to review previously established matches. Available job descriptions and information regarding the responding organization's compensation systems and specific jobs are analysed and discussed with the organization's representative. When the duties and responsibilities of jobs under review are deemed to be equivalent and equal in value to those described as representing a typical level of work in the occupational class survey specifications, a job match is completed. All available information related to the matched jobs, including job descriptions, is obtained to assist Compensation Research Officers in the editing of the subsequent survey returns of the responding organization. The Bureau assumes final responsibility for determining job matches and the data to be included in the survey findings.

The Wage Rate Survey

In previous reports in this series the Bureau relied on the Wage Rate Survey for regular basic data on office and operational classes. However, for this report, we have only extracted the data for the Carpenter, Maintenance and Electrical Repairer from that Survey.

The Wage Rate Survey is conducted by mail. Survey respondents identify the jobs which fit the descriptions provided with the survey questionnaire which is sent to the individual establishments of an organization. Data are effective October 1st of each year.

At the request of the parties to bargaining in the Federal Public Service, the Pay Research Bureau publishes a series of reports drawn from the Wage Rate Survey. The data are presented according to an agreed-upon methodology to meet the needs of Public Service bargaining. Data are produced by the Bureau in a series of "universes". In essence a "universe", as used here, is an extract from the total Wage Rate Survey. For example, the "75% Universe" represents 75% of the employees reported in defined industries and regions in the total Survey. For a more complete description of "universes" readers are referred to earlier reports in this series (see footnote on page 3).

In the present report data for both the Carpenter, Maintenance and Electrical Repairer are drawn from the "100% Universe" which comprises all data reported in the Wage Rate Survey in the following seven industrial groupings.

1. Mines, Quarries and Oil Wells
2. Manufacturing
3. Transportation, Communication and Utilities
4. Trade
5. Finance
6. Service
7. Municipal Governments

Data on rates of pay for the Agriculture, Forestry, Fishing and Trapping and Construction industries are not collected in the annual Wage Rate Survey of the Department of Labour. Hospitals, Provincial Governments and the Federal Government are excluded from the data reported here.

Personnel Administrator Survey

This Bureau survey is not part of our automated program and data collection is not based on job matching. The survey is designed to examine the salary structures in place for Personnel Administrators at the responding organizations using the federal government classification standard as the basis for comparison. The evaluation, in terms of Public Service points, is based on the application of the three factors (knowledge, decision-making and managerial responsibility) described in the classification standard. Important considerations in applying the standard are the organizational structure, job evaluation system and salary administration plan of the participating organization.

The selection of positions for evaluation is based on the principle of pricing the organization's salary structure. Consequently, jobs selected for evaluation must be stable and representative of other jobs at that pay level or salary point. It is important to note that the methodology does not permit the reordering of the organization's ranking of positions. The integrity of the structure within which the positions are evaluated and compensated is observed.

For the purpose of the tables shown in this Salary Trends report, where a grade or level salary structure is in place for the personnel function, the job rating for the selected representative position is considered to be representative of all positions at that grade or level. That point evaluation is compared to the point values applying to Public Service levels and all Personnel Administrators at the organization's level are then reported as equivalent to the appropriate Public Service level. Although the methodology is quite different, the data for individual levels are comparable over time and trend values are presented in conjunction with other Administrative classes in this report. The data for Personnel Administrators are effective January 1st of each year.

Because no survey specifications by level are used for Personnel Administrators the level descriptions shown in this report under Occupational Class Survey Specifications are only a summary of the duties of representative positions at each level as described in the Public Service Commission pamphlet "Personnel Administration". These summaries are intended to provide users of this report with some indication of the duties and responsibilities representative of a position at each of the seven Public Service levels of Personnel Administrator.

University Teacher Survey

Each year, all universities and colleges in Canada submit information to the Education, Science and Culture Division of Statistics Canada on salaries of faculty members. This information includes data on years of graduation, academic rank, discipline taught and other criteria to assist Statistics Canada in processing data for their purposes. By long-standing arrangement, Statistics Canada obtains from the institutions in the Pay Research Bureau's sample permission to release some of this information to the Bureau. Information is provided on computer tape and is electronically processed by the Bureau to ensure that only full-time, continuing appointment teachers are included. Those teaching in the areas of medicine, dentistry and nursing are excluded from analysis. Salary data by rank is then aggregated electronically and statistical measures tables produced. The salaries are collected and presented on an academic year basis, e.g. 1980/81, rather than at a single effective date. It should be emphasized that the identification numbers assigned to each academic as required by Statistics Canada are not forwarded to the Bureau.

Confidentiality of Survey Data and Reports

The Pay Research Bureau is very conscious of the requirement to protect the confidentiality of survey data contributed voluntarily by participating organizations. Normally, only organizations specified by the Pay Research Bureau receive our reports and their use is strictly limited to those authorized and concerned with compensation administration.

This report contains data extracted from those regular In Confidence or Restricted reports. Since this report is intended to provide trend data for research purposes, there is no restriction on the use of this information. The report may be circulated freely within organizations. Contents may be quoted in research papers or articles with the appropriate source identified.

To protect the confidentiality of the survey contributions of any one organization, rates of pay or numbers of observations are not shown where there are less than three organizations represented. Similarly the mean rate is not shown where there are fewer than five observations. In the case of median, deciles and quartiles, these rates are not shown where there are fewer than ten observations. The above are indicated by an asterisk (*) in the appropriate space, while a dash (-) indicates that no data were available.

Definitions of Statistical Measures

Mean: Sometimes referred to as the weighted average, the arithmetic mean is a calculated average, obtained by multiplying each rate by the number of observations at the rate and dividing the sum of the products by the total number of observations.

Third Quartile (Q3): In a distribution of observations arranged in descending order of value, the third quartile is the point above which 25 per cent and below which 75 per cent of the total observations fall. More precisely, it is the point in the distribution represented by $\frac{n+1}{4}$, where n is the total number of observations.

Annual Percentage Increase - This figure is calculated by dividing the annual mean rate for a job in one year by the annual mean rate for the previous year, then multiplying by and subtracting 100. (e.g., Engineer 1, 1977, \$15,353; 1978, \$16340: $\frac{16340}{15353} \times 100 = 106.4$; $106.4 - 100 = 6.4\%$)

Occupational Differential - The differential is calculated by dividing the mean rate for each class and grade by the mean rate for Engineer 3 for the comparable date and multiplying by 100.

Regional and Industrial Differentials - These differential measurements are produced by dividing the mean rate for a region, or sector, by the mean rate for Canada and multiplying by 100.

Occupational Class Survey Specifications

Summary survey specifications are published on the following pages:

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Chemist	13
Economist-Statistician	14
Engineer	15
Librarian	17
Physical Scientist	20
Research Scientist	23
2. <u>Administrative Classes</u>	
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Financial Administrator	26
Information Officer	27
Personnel Administrator	28
Purchasing Agent	30
3. <u>Administrative Support Classes</u>	
Clerk	33
Data Processor	34
Secretary, Stenographer, Typist	37
4. <u>Technical Classes</u>	
Draftsman	39
Electronics Technician and Technologist	40
Technical Support (Engineering and Scientific)	42
5. <u>Operational Classes</u>	
Carpenter, Maintenance	45
Electrical Repairer	46
Labourer, Non-Production	46
Stationary Engineer	46

1. SCIENTIFIC AND PROFESSIONAL CLASSES

ARCHITECT
1977 TO 1981

Architect 1

An entrance level. Under the supervision of a more senior architect, undertakes specific tasks selected for training value and to relieve the senior architect of detail.

Architect 2

Under supervision, carries out a variety of architectural assignments given in terms of projects to be completed with instructions concerning requirements, target dates and changes thereto.

Architect 3

Under general supervision, develops, coordinates and controls the development of architectural or related designs and contract documents; participates with other members of the group on developing and updating standards and provides advice and recommendations.

Architect 4

Under general supervision and in accordance with departmental standards and guidelines, carries out architectural projects involving complex features or coordinates a number of projects.

Architect 5

Under general supervision, acts as chief or second in charge of a group of professionals responsible for carrying out a variety of architectural projects and studies for a wide range of general and special purpose departmental buildings OR provides an advisory service in a specialized area.

Architect 6

Under direction, acts as chief or second in charge of a group of professionals responsible for carrying out a variety of architectural projects and studies of considerable scope and complexity OR provides an advisory service in a specialized area.

ARCHITECT
1982

Architect 1

An entrance level. Under the supervision of a more senior architect, undertakes specific tasks selected for training value and to relieve the senior architect of detail.

Architect 2

Under supervision, carries out a variety of architectural assignments given in terms of projects to be completed with instructions concerning requirements, target dates and changes thereto.

Architect 3

Under general supervision, develops, coordinates and controls either the development of architectural or related designs and contract documents, or the development by consultants of architectural landscape designs; participates with other members of the group on developing and updating standards and provides professional advice and recommendations.

Architect 4

Under general supervision, plans, investigates, designs, coordinates and controls the development of architectural and related engineering designs; as project officer, directs and coordinates the activities of consultants providing building-related design services on moderately complex projects.

OR

Under general direction, organizes, coordinates and controls the development of site layout, landscape architectural and related engineering design projects; controls and guides the use of outside consultants.

Architect 5

Under general supervision, acts as project manager or senior architect in charge of a group of professionals responsible for carrying out a variety of architectural projects and studies for a wide range of buildings or landscape developments OR provides an advisory service in a specialized area.

Architect 6

Under direction, plans, organizes and controls the work of an architectural design section comprising a group of professionals responsible for carrying out a variety of projects and studies of a considerable scope and complexity OR provides an advisory service in a specialized area.

CHEMIST

Chemist 1

A junior working level. Under the general supervision of a chemist, conducts routine chemical analyses such as analyses of samples of feeds and fertilizers, analyses of samples of foods, drugs and cosmetics, analyses of natural water systems; assesses the analyses required, decides appropriate methods and reports the results; participates in collaborative studies to evaluate analytical methods; maintains and expands professional knowledge and skill. The work involves modifying and adapting established analytical methods and, for certain positions, the work may call for the development and modifications of analytical methods and may include some supervision and training of laboratory technicians.

Chemist 2

A full working or specialist level. Under direction of a section supervisor, is responsible for planning and organizing the operation of a small unit; selects, trains, supervises and coordinates the work of one or two junior chemists and up to seven to eight technicians or technologists; writes technical reports containing conclusions and recommendations; drafts and writes specifications; provides technical assistance, advice and guidance to subordinates; ensures correctness and efficiency of procedures; evaluates new equipment, methods and techniques.

OR

As a specialist in a functional area may supervise a small number (normally one or two junior chemists and up to seven to eight technicians or technologists) evaluates procedures; ensures the maintenance of quality control programs; carries out research projects directed at developing more comprehensive procedures; performs non-routine analyses and new chemical procedures; gives lectures to technical and scientific personnel.

Chemist 3

A supervisory or senior specialist level, as a section head of a large laboratory (employing two or three chemists and up to 20 technicians and technologists) organizes, administers and controls the work being performed; develops work schedules and priorities; implements and oversees work procedures; supervises the work of subordinate professional and/or support staff and appraises their performance.

OR

As a specialist in charge of a moderately sized or small but complex or specialized chemical laboratory (employing two or three chemists and up to three or four technicians and technologists) plans, organizes, controls and administers the work of the laboratory; supervises directly one or more analytical chemists and/or non-professional assistants; provides technical advice and consultative service to associates and others in government and industry; conducts independent clinical research of a complex nature, and performs other related duties such as studying technical literature, participating in congresses, conventions, exchanging information on new developments, etc. In each case the work may be performed under the direction of a senior administrative officer or a highly qualified senior chemist.

Chemist 4

A senior supervisory level. Under the direction of a Director, develops, plans, organizes, coordinates and supervises the activities of a large chemical laboratory (employing over 25 professional and nonprofessional staff); carries out various administrative functions necessary for the efficient and effective operation of the laboratory; advises the Director on program and operational matters; provides a technical consulting and advisory service for interdepartmental and intradepartmental senior officers and industry; plans and implements projects for methods development and testing; ensures the availability and use of suitable, accurate up-to-date methodology; selects, trains and allocates a staff of professional and technical personnel; plans and prepares a laboratory budget.

ECONOMIST-STATISTICIAN 1977 TO 1981

Economist-Statistician 1

Under the direction of a section manager, plans and implements studies and surveys to investigate particular factors important to the section's overall research or data collection role. Using economic and statistical techniques, some of which may be sophisticated, designs data collection systems required for his studies, analyses data received and reports the results of his studies. Prepares recommendations for program or policy changes, forwards these to his section manager and discusses and defends such recommendations as required. Liaises with data processing personnel in the design and operation of computer systems required for his studies and surveys.

Economist-Statistician 2

Under the general direction of a section manager, plans, organizes and conducts research studies or surveys designed to investigate the past and/or short-term future behaviour of a variety of economic variables or indicators. As a specialist with several years of exposure to his field of study, selects and modifies as required the economic and/or statistical theories and methods to apply to his study; selects his data sources, interpreting or extrapolating data where necessary; analyses data received to identify significant trends and relationships; prepares recommendations based on his studies and forwards these recommendations to his section manager. Consults with data processing personnel in the design and operation of computer systems required for his studies and surveys. Establishes and maintains contacts with other specialists in his field, both in government and private industry, to monitor developments in his field and to exchange information on studies in progress, when appropriate.

Economist-Statistician 3

Under the general direction of a group manager, as a section manager or senior specialist, plans, organizes and directs a program of related economic and/or statistical studies. As well as directing the section's activities, the manager undertakes his own studies of a complex nature. Both the specialist and the manager are responsible for the development and implementation of projects which require the use and modification of sophisticated economic and/or statistical techniques and the occasional development and application of new unique theories and techniques. In addition, such projects frequently require the knowledge of theories, techniques and methods of other disciplines related to the particular field of study concerned. Under general direction the incumbent identifies problems requiring study, defines the scope of projects, develops hypotheses to be tested, selects and/or develops data sources, analyses and predicts the behaviour of several economic variables both in the short- and medium-term future, develops econometric models, and prepares reports on the project, defining his recommendations. The incumbent advises senior economics management on activities within his field of study. He identifies requirements for computer applications and outside consultants, negotiates contracts for these services, and liaises with those providing such services to ensure applicable, high quality work. Establishes and maintains contacts with specialists in his field to monitor developments and exchange information. He may be required to chair technical bodies of specialists from industry and/or government set up to study and make recommendations on problem areas.

Economist-Statistician 4

Under the general direction of an executive level Director, manages the operations of an economic or statistical group (composed of two or three sections) responsible for conducting a variety of interrelated economic and/or statistical surveys or special studies. These surveys or studies analyse the behaviour of complex variables to describe historical developments and to development short and long-term forecasts for national economic indicators, broad industry groups or regional economic structures. Develops and supervises the implementation of systems applicable to the survey and studies of all sections in his group. Coordinates the work done in his sections with related work currently being conducted by other organizations. Provides technical and professional advisory and consultant services to administrators, analysts and economists both within his own organization and in governments, industry and universities. Prepares or contributes input data and advice for background documents required for top management policy discussions. Develops and maintains contacts with users of his group's studies and with contributors of survey and study data. Attends national and international economic and statistical conferences.

ENGINEER

Engineer 1

An entrance level. Work at this level is normally performed by a recent graduate with less than two years experience and is used only to provide initial training under the supervision of a more senior engineer. A variety of selected engineering tasks are performed in order to develop knowledge and skill in the practices of a field of engineering. The work includes preparing simple plans

and designs, costing and making up bills of material in accordance with established codes, standards, drawings and other specifications. The work occasionally includes checking the work of draftsmen and other technicians. University graduation is required in applied science or engineering or eligibility for certification as a professional engineer.

Engineer 2

A junior working level. A continuing training and development level. Under the supervision of a more senior engineer, performs varied tasks and studies of limited scope requiring application of prescribed engineering methods. Accuracy in making observations and completeness in the presentation of data is required. University graduation is required in applied science or engineering or eligibility for certification as a professional engineer.

Engineer 3

A fully qualified level. Under general supervision of a senior engineer, is responsible for a project or part of a project or operation requiring a thorough knowledge of engineering and related fields.

OR

Plans and performs applied research, design and development work in an engineering specialty or field of engineerings.

Engineer 4

The first level of continuing supervision or continuing specialization. Under the direction of a senior engineer, plans and conducts engineering work, or coordinates and supervises an engineering project and related work performed by contractors or by subordinate engineers and technical support staff.

OR

Plans and performs applied research, design and development work in an engineering specialty or field of engineering, carries out experiments and tests, and investigates unusual and difficult problems, determines causes of failure, devises effective solutions.

Engineer 5

The first level of project coordination of two or more related fields. Under direction, plans, organizes and coordinates work on a number of projects in two or more related fields of engineering performed by contractors or by own engineering and technical support staff. The work is assigned in terms of objectives to be achieved and the financial limitations and administrative requirements involved.

OR

Plans and conducts applied research, design and development work in an engineering specialty. Investigates and advises on unusual and difficult problems encountered in an engineering practice.

Engineer 6

The first full level of management. Under direction, directs an engineering organization engaged in carrying out a continuing program involving interrelated projects which may be implemented through regional or district headquarters. The organization will typically consist of professional, technical and administrative support groups.

OR

Under general direction, directs an engineering staff or organization engaged in carrying out such work as applied research, design and development, the provision of advice, analysis and evaluation of engineering briefs and development of engineering standards.

LIBRARIAN

Librarian 1

This is the level for cataloguers responsible for cataloguing, classifying and assigning subject headings to books, monographs, pamphlets, documents, maps, etc., determining the form of entry according to established cataloguing rules or bibliographical sources, determining subject content and assigning appropriate subject headings and classification numbers to publications.

OR

For reference librarians responsible for providing reference and circulation services, conducting reference interviews, answering reference questions, collecting and identifying reference material, compiling selective bibliographies, operating or supervising a circulation desk and maintaining circulation records.

OR

For bibliographers responsible for compiling selective, annotated and critical author or subject bibliographies and for selecting books, periodicals and other publications to be included in continuing, specialized bibliographies. In each case the work is performed under the supervision of a senior librarian.

Librarian 2

This is the level for a librarian in charge of a small or branch library; directs the operations of the library; compiles descriptive catalogues; provides a comprehensive reference service; arranges inter-library loans; selects and recommends for purchase books, serials and other library material; prepares or assists in preparing the library budget for approval; supervises a small number of support staff.

OR

As a supervisor in a functional area acts as the Senior Cataloguer or Senior Reference Librarian or Senior Bibliographer in a medium-sized library; responsible for the cataloguing or reference or bibliographical services in the library; supervises the work of one or two junior librarians or two or three support staff in the functional area supervised.

OR

As a specialist in a functional area, catalogues, classifies and assigns subject headings in connection with difficult or complex library material; requiring knowledge and judgement in the subject matter involved; or provides a full range of reference services requiring knowledge and expertise in conducting reference interviews, locating, collecting and identifying technical and complex reference material, and in compiling selective bibliographies; or responsible for the compilation and indexing of complex author or subject bibliographies where knowledge and judgement are required in maintaining comprehensive and complex bibliographical services. The work usually requires assigning to and checking the work of one or two junior professional or two or three nonprofessional support staff.

In each case the work is performed under general supervision.

Librarian 3

This is the level for a librarian in charge of a moderately sized or small but complex or specialized library; organizes, develops and administers the library's services; makes recommendations concerning staff, budget and the selection, acquisition and disposal of library material and equipment; arranges inter-library loans; supervises supporting professional and nonprofessional staff.

OR

As a section head in a large library, organizes, directs and controls the work of the cataloguing or reference or bibliographical section; develops, schedules and revises work priorities and procedures; supervises the work of supporting professional and nonprofessional staff and appraises their work performance.

OR

As a coordinator of small or branch libraries, develops, coordinates and directs the services of branch libraries; establishes operating standards and procedures and suggests techniques for their improvement; maintains statistics of branch library operations; directs, reviews and assesses the work of supporting staff.

In each case the work is performed under the direction of a senior administrative officer or senior librarian.

Librarian 4

This is the level for a chief librarian in charge of a medium-sized or moderately sized but complex or specialized library; plans, organizes, coordinates and supervises the programs and services of the library; implements library policy and recommends policy changes; controls library financial commitments and expenditures; directs and supervises the cataloguing, reference, circulation and bibliographical services of the library; may be responsible for managing a computerized data processing unit in the library system; selects, trains, supervises and evaluates the work of supporting professional and nonprofessional staff.

OR

As a chief of a division in a very large library, plans, organizes and directs the work of the division; establishes library policy for the division; devises performance indicators to measure operating efficiency; prepares budgetary estimates; coordinates work of the division with other divisions in the library; supervises and trains professional and nonprofessional staff and recommends their selection, promotion, transfer and dismissal.

In each of the above cases the work is performed under the direction of a senior administrative officer or a chief librarian.

Librarian 5

This is the level for a chief librarian in charge of a moderately large or medium-sized complex and/or specialized library system; plans, organizes and directs the activities of the library and coordinates the services it provides; formulates and implements library policies and recommends changes in policies, procedures and techniques; establishes long- and short-range objectives and programs; prepares budgetary estimates and controls library expenditure and financial commitments; undertakes difficult and important research programs in library science; coordinates the services of the library with other libraries; selects, trains and supervises professional and nonprofessional staff either directly or through subordinate supervisors.

OR

As an assistant chief librarian in a large library or assistant branch director in an extremely large library, assists in the administration of the library or the branch; advises on and participates in the formulation and implementation of overall library or branch policy; participates in the general planning, organizing and review of the program and services provided by the library or branch, evaluates their overall effectiveness and recommends changes and improvement where required; develops and maintains contacts with other libraries and cooperates with them in areas of mutual benefit and interest; participates in the selection, training and supervision of a large number of professional and nonprofessional support staff either directly or through subordinate supervisors.

In each of the above cases the work is performed under the general direction of a senior executive officer or a chief librarian.

Librarian 6

This is the level for the chief librarian of a large library system; organizes, coordinates and administers the program and operations of a large library system which may include a large number (20 or more) of branch libraries; advises senior executive personnel in the organization served by the library on library policy and directs the implementation and control of established policies; provides leadership and guidance in library planning and development and in program evaluation; prepares the library budget and controls expenditures and financial commitments; promotes and develops effective liaison with other libraries, universities, research organizations and related institutions on a national and international scale; promotes the training and development of a large professional and nonprofessional support staff directly and through subordinate supervisors; responsible for the selection, direction and evaluation of senior professional library personnel.

OR

As the director of a large branch in an extremely large library system, plans, organizes and directs the programs and activities of the branch; formulates, implements and evaluates the policies of the branch, establishes objectives and priorities and prepares plans for the long-range development of the branch; prepares budgetary estimates for the branch and controls branch expenditures; promotes effective cooperation and coordination of the functions of the branch with those of other major branches and libraries; maintains communications with other libraries and related institutions, such as universities, at home and abroad, responsible for the selection, training and direction of a large professional and nonprofessional support staff directly and through subordinate supervisors; participates in the selection, direction and evaluation of senior professional library personnel.

In each of the above cases the work is performed under the general direction of a senior executive officer.

PHYSICAL SCIENTIST

Physical Scientist 1

A junior working level. Under supervision performs work at a professional level in one specialized area of the physical sciences. Activities are conducted within a limited scope and clearly defined objectives requiring application of routine and prescribed scientific techniques. Some examples of the work at this level are:

As a mineralogist, selects, examines and tests rock samples to assist in the age determination of geological formations and layers, determines mineral composition of rock samples submitted for analysis, correlates and records chemical and mineralogical data and prepares charts and draft reports on analyses.

OR

As a geological assistant, prepares geological compilation maps, compiles data for computer indexing, and prepares evaluation and assessment papers on mining exploration programs; assists in field surveys and collecting and interpreting data; analyses and determines mineral composition of rocks.

OR

As a water management scientist, participates in planning, designing, controlling and administering projects in the development, use and conservation of water resources; organizes field studies and investigations; assembles and interprets test data, reports and survey results; provides advice on the biophysical aspects of water and water management.

Physical Scientist 2

A full working level. Under general supervision performs work at a professional level, normally within a single field of specialization. Plans, controls and conducts a number of laboratory or field studies; activities differ but are normally related to each other as part of a larger project. Some examples of the work at this level are:

As a forest hydrologist, plans, conducts and reports on research to provide information on soil erosion, drainage and forest cover; develops guidelines for forestry operations and water and soil conservation; acts as project leader and chairman of a small multi-agency research group in the field of forest hydrology.

OR

As a physicist, plans, organizes, conducts and supervises research work related to the collection, classification, identification and other aspects of pollutants; develops analytical methods and techniques; plans and conducts special studies; provides analytical advisory and consultative services.

OR

As a geobotanist, plans and controls studies in the rehabilitation of mining wastelands; gathers, assesses, integrates and records existing information; suggests priorities for rehabilitation programs; provides advice and technical assistance on problems in the rehabilitation of mining wastelands.

OR

As a geologist, plans, develops, organizes and conducts investigations into the surface and underground geology; investigates particular areas where the mineral industry has encountered problems; plans and controls the work of several part-time assistants.

Physicial Scientist 3

An advanced working level. Under direction performs work which may touch on several fields of specialization; plans, organizes and conducts detailed projects or studies that may entail responsibility for work of other scientists and coordination of a number of unrelated activities. Some examples of the work at this level are:

As a reservoir analyst, conducts investigations and studies to determine volumes of reserves of oil and gas for specific pools and fields to meet organizational requirements; provides an advisory service on various aspects of the oil and gas industry.

OR

As an exploration geophysicist, undertakes the geophysical investigation of oil and gas lands in a district; provides advice and collaborates with geologists in solution of specific geological problems and technical adequacy of geophysical reports; provides geophysical services and evaluation of lands in connection with administration of oil and gas industry.

OR

As a senior geologist, plans, organizes and conducts, under direction, investigations into the surface and underground geology of a large area; investigates mining properties and mineral districts; plans, organizes and controls the work of a small professional, technical and clerical staff in the area, and provides a special geological service to promote mineral exploration.

Physical Scientist 4

The first level of continuing supervision or continuing specialization. Under direction performs work at an advanced level in a number of related fields of specialization; plans, organizes and controls operation and staff of a program or section where projects of varying degrees of intensity are conducted simultaneously; delegates authority and develops procedures to ensure attainment of established objectives. Some examples of the work at this level are:

As head of a mineralogy section, under direction, plans and conducts mineralogical investigations and research projects to develop and control mineral extraction processes; advises other scientists and metallurgical engineers on ores and mineral products; plans, organizes and controls the work of the mineralogy section.

OR

As a senior reservoir analyst, under direction, provides an advisory service to the oil and gas industry; conducts investigations and recommends the undertaking of scientific studies to determine volumes of oil and gas reserves; collaborates with agencies and officials at senior technical levels to resolve problems of oil and gas reserve determination.

OR

As head of an exploration and geological service, under direction, plans, organizes and controls the work of the service; administers the geological information and mining exploration industry advisory program; directs the evaluation and storage of geoscience data and provides a consulting and advisory service.

OR

As an ecological scientist, under direction, develops comprehensive guidelines, approaches and requirements for scientific studies to identify ecological protection needs and control measures; plans and coordinates scientific studies relating to proposed energy programs and ecological policy statements.

Physical Scientist 5

An advanced supervisory level, or first level of management. Under direction, directs work in a number of interrelated fields of specialization; responsible for planning, administering and coordinating the work and staff of a large program or of a division requiring a wide knowledge of diverse fields; provides advice, analysis and evaluations of developments and consultant services on complex and difficult problems. Some examples of the work at this level are:

As chief mineralogist, under general direction, plans, organizes and directs the work of a large mineralogy section; administers and controls the activities of professional, technical, support and part-time personnel; provides an advisory and consultative service on mineralogical matters.

OR

As chief ecological scientist, under general direction, plans, organizes, implements and controls a national program which controls and identifies ecological protection requirements; administers and controls the activities of a multidisciplinary unit; provides an advisory and consultative service on ecological protection matters.

OR

As a chief, reserves division, under general direction, provides a professional consulting service to the oil and gas industry to meet organizational requirements; originates investigations and recommends and conducts specific studies; coordinates work and collaborates with oil and gas agencies and professionals at the senior technical level.

RESEARCH SCIENTIST

This class comprises scientists, the primary purpose of whose employment is to conduct fundamental or applied research in the biological or physical sciences or in mathematics.

2. ADMINISTRATIVE CLASSES

COMPUTER SYSTEMS ADMINISTRATOR

Computer Systems Administrator 1,

Programmer 1A

Entrance and orientation level. Attends classes for initial training in computer programming. Receives on-the-job training. Under supervision, performs simple coding and arranges assemblies and tests and performs related work. Prepares control cards and statement for generalized and utility programs such as sorts, report generators, etc.

Computer Systems Administrator,

Programmer 1B

Development level. Receives more comprehensive and varied on-the-job training. Is introduced to planning and preparation of problem definition and program specifications. Works closely with senior programmer with a view to broaden experience.

Computer Systems Administrator,

Programmer 1C

This is a working level. Presumes familiarity with some phases of computer projects such as systems analyses, programming techniques and development of programs including their operation.

Computer Systems Administrator 2:

Senior Programmer

Under the supervision of a Project Leader, prepares electronic computer programs and machine operating instructions for problem solving and mass data applications for processing in-house or on outside contractors' computers; adapts or revises computer programs written for various computer installations.

Systems Analyst

Under the general supervision of a project leader, participates in studies to establish the technical and economic feasibility of proposed computer applications; plans and develops automated data processing systems for mass data applications related to the development, maintenance and analysis of automated master files.

Computer Systems Administrator 3:

Senior Analyst

Under direction plans and directs the work of a staff group providing a computer system analysis and programming service for mass data applications; analyses the feasibility, designs, tests and implements systems to produce output to meet client requirements.

Computer Systems Administrator 3:

Supervisor, Computer Installation

Under the general direction of a manager, assumes the responsibility for the control of all data processing operations performed on a large scale real-time multi-programming terminal oriented computer system; plans, directs and coordinates the work of computer operations supervisors and operators.

Computer Systems Administrator 4:

Head, Systems Analysis and Programming

Under the direction of a division head, directs the activities of a computer system analysis and programming section in which from 20 to 30 computer systems analysts, programmers and clerks are engaged in the development and maintenance of applications for processing data, using large scale and medium scale support computers; provides information and advice to senior departmental officers and user departments.

OR

Chief, Data Processing Service

Under the direction of a supervisor, plans and supervises the activities of a data processing section which includes the planning, development and processing of mass data applications, using departmental and outside contract facilities; advises management officials on the use and development of departmental data processing resources.

Computer Systems Administrator 5:

Director, General Analysis and Programming Division

Director, Data Processing Service Division

As a manager, either directs a division of systems analysts and programmers engaged in determining mass data applications or directs a data processing division responsible for the operation of a large computer and peripheral equipment installation. Advises management committees, user officials and officials of other organizations on matters pertaining to automated data processing equipment facilities and services available and future manpower and equipment requirements.

FINANCIAL ADMINISTRATOR

Financial Administrator 2

Internal Auditor

Under the supervision of an audit group leader, audits records and accounts, performs physical test checks of inventory, stores and equipment, and monitors operational systems. Reports errors, wasteful or improper practices, and other matters requiring further investigation.

OR

Financial Analyst or Accountant

Under supervision, performs a variety of financial tasks which might include: examination of accounting statements for completeness, internal consistency and conformance with accounting principles; preparation of instructions for and overseeing the collection of input data for budgets and program reviews; preparation of financial statements; simple or prescribed analysis of statements, budget estimates, or program review data.

Financial Administrator 3

Financial Analyst or Accountant

Under supervision, develops financial planning, control, or reporting systems; oversees the collection, collation and presentation of data either for financial statements and records or for budgetary estimates and program reviews; analyses statements and reports; advises line management of the meaning and application of financial information; carries out special studies.

Financial Administrator 4

Audit Group Leader or Supervisor of a Financial Section

Under the direction of a financial manager, plans, assigns and checks the work of the section; acts as a project team leader in the development of new systems or forecasting models; analyses reports, statements and forecasts; interprets financial systems, reports and data for senior management; carries out special studies.

Financial Administrator 5

District Financial Coordinator

Under functional direction from headquarters, advises district management in financial matters; operates and interprets control systems to line managers; analyses financial statements and reports; supervises the financial operations of the district, overseeing the maintenance of financial records and the preparation of district statements, budgetary estimates and program review reports; carries out special studies.

Financial Administrators 6 and 7

Financial Manager

Under the direction of senior corporate management, directs the operations of a financial department (accounting, auditing, or financial analysis departments). Develops long-range plans, programs and systems related to his functional area; advises corporate management of financial implications of policies and directives, and carries out related special studies.

INFORMATION OFFICER

Information Officer 1

Under the supervision of a senior information officer, performs a variety of tasks selected to develop knowledge and skill in varied specialties of the field of information such as writing, advertising, broadcasting, editing and film planning.

Information Officer 2

A working level position. The work is performed under supervision and involves straightforward assignments in one specialty of the field of information such as editing or writing in one subject-matter area.

Information Officer 3

A senior working level. The work is performed under general supervision and involves complex assignments in one specialty of the field of information or different responsibilities in two or more specialties such as different methods of editing and producing a publication, or planning and implementing a public relations project.

Information Officer 4

A specialist level or the first level of supervision. The work is performed under direction and involves either the provision of advice of a complex nature, and the development of new ideas and methods in a specialty, e.g., organization relations officers, or the managing of a small unit of an organization's information program such as an internal information service.

Information Officer 5

A senior specialist level directing the work of a small information unit or a manager of a medium-sized information unit with general responsibilities in two or more specialties. The work is performed under direction and involves either full responsibility for a specialty such as all scientific editing in an organization with a technical orientation or the management of several small units of an information program such as public relations and exhibits or media relations involving press, radio and television units.

Information Officer 6

Manager of a major unit or several medium-sized units in a large information service or the director of a total information program for a small to medium-sized organization. The work is performed under general direction and involves originating, planning and implementing significant information programs which must explain various policies and objectives to diverse publics and the general public.

Information Officer 7

Director of a large and complex information service in a large organization. The work is performed under general direction and involves full responsibility for originating, planning and managing an organizational information service which must explain complex and controversial policies and objectives to diverse publics and the general public.

PERSONNEL ADMINISTRATOR

Personnel Administrator 1 (PE-1)

This is considered a junior or training level, at which duties are carried out under close supervision. PE-1s may have the same basic duties as PE-2s, but with a lesser degree of responsibility.

Personnel Administrator 2 (PE-2)

For example, a Classification Officer at the PE-2 level would be expected to:

- analyse, evaluate and classify the positions within a particular department in relation to the skills and experience required, and the duties to be carried out
- determine the level of authority and responsibility of the positions existing in a department
- participate on classification grievance review committees
- take part in departmental training programs to familiarize management with classification policies.

Personnel Administrator 3 (PE-3)

For example, included in a Compensation Officer's duties at this level would be:

- reviewing, analysing, monitoring and evaluating current compensation policies for those public service occupational groups not subject to collective bargaining
- developing and formulating, in cooperation with Standards and Staff Relations Officers, proposals for new pay rates or systems for all occupational groups
- implementing new pay and compensation plans, and advising managers on interpretation and application of existing plans
- reviewing, analysing and evaluating departmental submissions on compensation matters, such as salary administration.

Personnel Administrator 4 (PE-4)

In the area of Human Resources Planning, for example, a Section Head at this level would:

- plan, develop and control a comprehensive manpower inventory program to provide management with up-to-date information on employee qualifications, interests, aptitudes, potential and work performance
- plan, develop and implement a comprehensive manpower forecasting system
- recommend courses of action designed to meet specific development needs
- direct subordinate staff.

Personnel Administrator 5 (PE-5)

Administrative duties increase at this level, at which a Senior Staffing Officer, for example, would:

- plan and organize recruiting and employment activities to satisfy public service needs, in particular occupational groups
- implement staffing requirements for positions within a particular occupational group
- plan and organize career administration activities for employees within particular occupational groups
- establish and maintain contacts and working relationships within the department, and with other departments and agencies on various staffing activities related to assigned occupational groups
- establish and maintain working relationships outside the federal government within the fields of the occupational groups staffed by the officer
- direct subordinate staff.

Personnel Administrator 6 (PE-6)

Policy development becomes one of the major areas of responsibility at this level, where the duties of a Chief of a Staff Relations Division, for example, could include:

- developing policies, programs and procedures on staff relations and conditions of service, then making recommendations in these areas to departmental and Treasury Board officials
- advising and guiding departmental managers on staff relations matters, to ensure effective, consistent administration of collective agreements, adjudication rulings and other regulations
- directly supervising a staff of specialist officers and providing advice and guidance to regionally-based staff relations officers
- administering departmental grievance procedures
- participating in collective agreement negotiations.

Personnel Administrator 7 (PE-7)

At this senior level, a Director of Personnel, who would fulfill a Generalist role, could:

- advise the Deputy Minister and other senior officials of a department on personnel administration policies and practices in such areas as recruitment, manpower planning, position classification and staff relations
- provide advice and guidance directly and through supervisors, to personnel administrators and administrative and line managers in divisions and field offices
- plan, organize and direct the work of the personnel division
- perform related duties, such as serving as a member of the departmental management committee or as chairman or member of various other personnel-related departmental or interdepartmental committees.

BUYER AND PURCHASING AGENT
1977 To 1981

Buyer (Clerical and Regulatory Group 5)

A Junior Buyer of "off-the-shelf" goods. Under supervision, prepares invitations to tender, analyses returns and recommends acceptance of lowest tender.

Purchasing Agent 2

A working level Buyer of standard goods. Under general supervision of a senior purchasing agent, prepares invitations to tender or solicits bids, analyses returns and conducts simple negotiations with suppliers. Recommends acceptance of most favourable tender or bid.

Purchasing Agent 3

Senior Buyer of large orders of standard goods. Under the direction of the Purchasing Manager, invites tenders, solicits bids and analyses returns. In consultation with client department, conducts negotiations, which may be complicated, to establish purchase contracts.

OR

Supervisor of a section of junior buyers. Under the direction of the Purchasing Manager, oversees the work and authorizes purchases of junior buyers. In consultation with client department, conducts negotiations, which may be complicated, as required.

Purchasing Agent 4

Specialist Buyer of engineering goods. Under the direction of the Purchasing Manager and in consultation with the client department, analyses technical requisitions, then solicits and evaluates contractor proposals. Negotiates and administers complex technical contracts.

Purchasing Agent 5

Senior Specialist Buyer of research services and developmental goods or large orders of engineering goods. Under the direction of the Purchasing Manager and in consultation with the client department, analyses technical requisitions then solicits and evaluates contractor proposals. Negotiates and administers complex technical contracts.

PURCHASING AGENT 1982

Purchasing Agent 1

Primarily a developmental level. Under supervision, conducts the procurement of a variety of low-dollar value commercially available goods and services: requests quotation of prices or prepares invitations to tender for goods with defined terms and conditions of sale; analyses competitive tenders to determine the lowest responsive bidder; conducts routine negotiations where competition does not exist, obtaining guidance from supervisor for more complex purchases; issues purchase orders within delegated authority and recommends acceptance of those in excess of authority.

Purchasing Agent 2

Under general supervision, plans, organizes and conducts the procurement of goods and services of a high-dollar value: prepares invitations to tender, requests for proposals or requests quotations; evaluates competitive tenders and decides on the lowest responsive tenderer. Where competition does not exist, conducts with suppliers single source negotiations which may be complicated. Issues contracts within delegated authority and recommends acceptance of those above authority. May administer contracts to ensure that terms and conditions are met. Develops and maintains sources of supply.

Purchasing Agent 3

Under direction, plans, organizes and conducts procurement activities of new or infrequently purchased goods or services of a high-dollar value: issues requests for proposals or invitations to tender; evaluates competitive tenders to determine the lowest bidder able to comply with requirements; conducts negotiations with suppliers and customer departments for the preparation of contracts where sensitive and complex requirements exist and/or where only sole sources of supply are available; approves and awards contracts within delegated authority and recommends approval above delegated authority; for some positions a substantial portion of time may be devoted to contract administration to ensure that terms and conditions of the contract are met.

OR

Buyer Supervisor

Performs the above duties to a lesser degree, and in addition, spends a substantial portion of time supervising and coordinating a section of subordinate buyers and clerks buying a variety of less complex goods and services.

Purchasing Agent 4

Specialist Buyer

Under direction, and in consultation with the client department, plans, conducts, administers and finalizes the procurement of engineering products and/or research services: analyses and evaluates technical requisitions; requests and evaluates contractors' proposals; negotiates with officials of contractors to reach agreement on complex technical contracts; approves contracts and conducts complex contract administration.

OR

Section Head

Under direction, directs the operations of a purchasing section or small purchasing office responsible for the procurement of a wide variety of goods and services: directs buying staff, forecasts and schedules work, and establishes improved procedures.

Purchasing Agent 5

Senior Specialist Buyer

Under direction, and in consultation with the client department, plans, conducts, administers and finalizes the procurement of unique or complex engineering products and/or research services: defines in conjunction with the client department its requirements and acquisition plans for proposed projects; analyses and evaluates technical requisitions; requests and evaluates contractor proposals; negotiates with senior officials of contractors to reach agreement on complex technical contracts; approves contracts within delegated authority and conducts complex contract administration.

OR

Head of Purchasing

Under general direction, plans, organizes and directs the purchasing operations of a supply centre responsible for the procurement of a wide variety of goods and services: directs buying staff, forecasts and schedules work flow, and establishes improved procurement procedures.

3. ADMINISTRATIVE SUPPORT CLASSES

CLERK From 1977

Clerk 1

Under supervision, and following closely prescribed and detailed instructions, performs general clerical duties which are routine, repetitive and related. The work methods involved are simple and the work is checked by the supervisor. The services are primarily in one administrative support field and require the application of up to two sets of significantly different methods and procedures. There is little scope for independent action or decision required in the application of the prescribed or standardized office procedures or directives. In all positions at this level there is some requirement for showing other employees how to perform tasks or duties.

Clerk 2

Under supervision, performs clerical duties which follow well defined methods and procedures and require little scope for independent action or decision in the application of the prescribed or standardized office procedures or directives. The duties performed are related to up to three fields of an administrative support nature or require the application of three or more sets of methods and procedures. Normally the work is subject to check by the supervisor. In all positions at this level there is some requirement for showing other employees how to perform tasks or duties. There may be positions which include limited supervisory responsibilities such as allocation of tasks and maintenance of standard work performance.

Clerk 3

Under supervision, performs clerical duties usually related to one administrative support field and which require the application of up to two sets of significantly different yet well established work methods and procedures. The work allows some scope for decisions to be made in accordance with readily understood rules and practices such as when recommending procedural changes or revising established procedures. Advice is available from the supervisor and portions of the work are subject to check. Some positions may require a significant supervisory responsibility but normally at this level supervision is restricted to showing other employees how to perform tasks or duties.

Clerk 4

Under general supervision, performs clerical duties normally related to not more than three fields of an administrative support nature or requiring the application of three or more sets of methods and procedures. The work methods and procedures are normally well established and well defined in regulations, directives and manuals. The exercise of judgement is required when making decisions within the established guidelines and in accordance with established practice. Normally the work is subject only to spot checks. Supervisory responsibilities are often limited to showing other employees how to perform tasks or duties. For those positions with a definite supervisory requirement, there is a variety in the nature of the supervisory responsibility.

Clerk 5

Under general supervision performs clerical duties related to the supervision of from one up to four or more fields of an administrative support nature and the application of pertinent methods and procedures. The work methods and procedures are normally well established and well defined in regulations, directives and manuals. The solution of some problems requires the adaptation of established methods and procedures, or the search for an application of precedent. Normally the work is not subject to check. Significant supervisory responsibilities are a normal requirement at this level. Supervision may be exercised directly or through one or more subordinate supervisors.

CLERKS

Wage Rate Survey

1972 To 1977

Clerk, General Office

Performs a wide range of clerical duties such as copying, recording, compiling and otherwise processing information.

Clerk, General Office, Junior

Under close supervision, duties of routine and repetitive nature; requires no knowledge of systems or procedures.

Clerk, General Office, Intermediate

Under limited supervision, duties of semi-routine nature; requires limited knowledge of office systems and procedures; follows a standardized pattern in carrying out assignments.

Clerk, General Office, Senior

Under little or no direct supervision, duties of advanced or complicated nature; requires considerable knowledge of departmental or company systems and procedures; must exercise considerable judgement in performing duties; prepares complex reports requiring independent analysis.

DATA PROCESSOR

From 1977

Data Processor (Conversion) Level 1

This is an entrance and developmental level for data entry operators (keypunch, etc.). Under supervision, operates a type of data capture machine, such as: an alpha-numeric keystation, an optical character recognition data conversion machine or a direct data entry machine, to process non-complex source documents.

Data Processor (Conversion) Level 2

This is the full working level for data entry operators (keypunch, etc.). Under general supervision, performs one or more data conversion functions, such as: operating alpha-numeric keypunch, or an optical character recognition data conversion machine or a direct data entry machine to process complex source documents; preparing drum cards; providing guidance to junior operators and visually verifying recorded data.

Data Processor (Conversion) Level 3

This is a senior working or "lead-hand" level. Under general supervision, performs several of the following functions; operating an alpha-numeric keyboard on a variety of data conversion equipment, such as a keypunch or direct data entry machine; operating a remote job entry terminal; preparing program drum cards; and providing guidance and training to junior operators.

Data Processor (Conversion) Level 5

This is the first full supervisory level. Under general supervision, performs several of the following duties such as: controlling the operation of a Data Conversion System and its remote keystation, controlling and supervising activities of a unit of conversion equipment operators (approximately 25 operators); reviewing, correcting, preparing and controlling source documents; assisting in the administration of a unit and supervising a number of employees.

Data Processor (Production) Level 2

This is a full working level for operators of peripheral equipment. Under supervision, performs several of the following data production functions such as: controlling or operating printers, tape and disc drives, card readers, card-punchers and composite machines on several systems; controlling an optical character recognition machine; maintaining a daily log and providing users with data processing information; or, as a tape librarian in a small library controlling the storage and issue of magnetic tapes for computer processing; occasionally demonstrating operating procedures to new employees.

Data Processor (Production) Level 3

Under general supervision, operates one or more of the following pieces of equipment: a unit record machine for tabulating, a high speed printer system, peripheral equipment, an off-line computer, a non multi-programmed computer or as a junior operator or operator-in-training the support console for multi-programmed computers. Controls a remote terminal; designs wiring of plugboards and tests for flaws in wiring. Instructs junior employees in operating equipment and reports verbally on their progress.

Data Processor (Production) Level 4

Under general supervision:

- operates the console of a computer;

OR

- controls processing of various programs;
- as a tape librarian in a large tape library, develops procedures for storage of tapes and cards.

Advises users of various services; allocates work to and supervises junior employees.

Data Processor (Production) Level 5

Under direction:

- writes new operational procedures to apply innovations in software and equipment; assesses current operating procedures for a computer and maintains manuals for computer operations;

OR

- plans and develops training programs for data processors; instructs processors on systems, procedures and equipment; selects courses for attendance by senior processors and evaluates effectiveness of courses;

OR

- as a shift or day supervisor, organizes processing work for a computer; resolves operating problems; reports on utilization of equipment;
- establishes sequence for processing jobs on a number of computers; allocates computer time; recommends modifications in scheduling and advises users accordingly;

OR

- as a shift or day supervisor, controls a computer in an on-line, real-time communications system; controls tests of a new software and application programs and operates console of the back-up computer.

Supervises the work of junior employees.

Data Processor (Production) Level 7

Under direction:

- plans the work of a data processing installation; organizes the staff and controls the work of the installation;

OR

- manages the complete operation of a computer; supervises the staff of the installation; advises users on the installation's requirements.

DATA PROCESSING

Wage Rate Survey

1972 To 1977

Keypunch Operator, Female (Card-Punch Operator)

Operates alphabetic and numeric keypunch machine to transcribe data from source material onto punch cards. May perform verifying duties and be designated accordingly, for example:

Typist, Data Processing;
Verifier Operator.

Keypunch Operator, Junior - Female

Work of standard and repetitive nature, proofreads and corrects errors in copy.

Keypunch Operator, Senior - Female

Records and verifies accounting and statistical data on punch cards working from a wide variety of source documents and coded material.

SECRETARY, STENOGRAPHER, TYPIST

From 1977

Secretary 2

Provides secretarial services to the manager of an organization responsible primarily for a single program with closely related activities. Duties generally are routine and repetitive and concern one subject-matter area. Procedures are generally well established, but some initiative and judgement is required in locating relevant background material for incoming correspondence, making arrangements for meetings and conferences, redirecting callers and correspondence, and making travel arrangements.

Secretary 3

Provides secretarial services to the manager and staff of an organization responsible for several related administrative programs through several subunits. Some of the duties are involved and there is a frequent requirement to obtain data and information in connection with the several related administrative programs carried out by the organization. There is a moderate degree of initiative and judgement required as guidance is not always available.

Stenographer 1

Under close supervision, takes dictation and transcribes correspondence, reports and other matter from notes and transcribing machines. Subject matter of work normally contains common terminology of government business and repetitive terms relative to a specialized function.

Stenographer 2

Under general supervision, takes dictation and transcribes notes containing difficult, specialized terminology as in legal, medical, scientific or technical reports and correspondence.

Typist 1

Under close supervision, carries out a variety of typing assignments the subject matter of which normally contains common terminology of business and repetitive terms relative to a specialized function.

Typist 2

Under general supervision, carries out a variety of typing assignments the subject matter of which is characterized by difficult, specialized terminology, as in legal, medical, scientific or technical reports and correspondence.

STENOGRAPHER

Wage Rate Survey

1972 To 1977

Stenographer

Records various kinds of dictated or other matter in shorthand and makes a transcription in typewritten form. May perform a variety of clerical duties.

Stenographer, Junior - Female

Work involves a normal range of business vocabulary.

Stenographer, Senior - Female

Work generally of a more difficult nature involving varied and technical vocabulary.

TYPIST

Wage Rate Survey

1972 To 1977

Typist

Types letters, reports, statements, stencils, forms, addresses or other straight copy material from handwritten manuscript, rough draft or corrected copy.

Typist, Junior - Female

Follows a standard pattern; proofreads for errors; assembles material.

Typist, Senior - Female

Close attention required due to frequent and varied use of technical and unusual wording.

4. TECHNICAL CLASSES

DRAFTSMAN

Draftsman 1

Under supervision, prepares simple drawings, charts or diagrams in accordance with detailed instructions and procedures. The work to be performed requires little judgement in placing features, symbols or names.

Draftsman 2

Under supervision, prepares maps, charts, diagrams and drawings from detailed sketches and in accordance with established practices and techniques. Is responsible for producing neat and accurate drawings, but assistance is available when guidelines are not specific.

Draftsman 3

A working level. Under general supervision, prepares complete drawings, charts, diagrams and maps from sketches and layouts. Is responsible for planning the presentation of work, choosing drafting methods, specifying materials, tolerances, limits, fits and production or construction methods.

Draftsman 4

A specialized or experienced working level in such areas as architectural, mechanical and electrical drafting. Under general supervision, prepares sketches, layouts, drawings, maps and charts. Requires a good knowledge of drafting techniques. Is expected to perform his duties without immediate supervision and to select the techniques and standards to be used.

Draftsman 5

Generally the first level of continuing supervision. Under the general supervision of a senior supervisor or of an engineer or architect, supervises a group of approximately four to ten draftsmen involved in one specialty of drafting work.

Draftsman 6

Under general supervision, supervises a drafting unit of four to ten employees, where work of a complex nature is involved or where additional responsibilities are assigned. Generally, the draftsmen assigned to his supervision are involved in more than one drafting specialty.

Draftsman 7

Under the direction of a chief draftsman or an engineer or architect, organizes and controls the operations of a drafting section. Through subordinate supervisors, supervises a group of employees working in various units or teams.

ELECTRONICS TECHNICIAN & TECHNOLOGIST

Electronics Technician & Technologist 1

This is an entrance level for graduates from a recognized course in electronics at an institute of technology.

Electronics Technician & Technologist 2

This is a continuing training level, or the lowest working level for the maintenance of electronic equipment characterized by its simplicity of design.

Electronics Technician & Technologist 3

This is a qualified working level for a technician normally involved with the maintenance of a few systems similar to those listed at Level 4 (e.g., HF, VHF, and UHF, transmitters and receivers, or navigational radars);

OR

in research, design or development, performs, under supervision, a variety of tasks requiring the application of prescribed techniques such as the construction, modification, installation, testing and maintenance of equipment.

Electronics Technician & Technologist 4

This is the fully qualified working level for the maintenance of a variety of electronic equipment and systems of complexity comparable to those described below in the level determinants;

OR

in applied research, design or development, assists in the development of experimental equipment, and constructs, modifies, installs, maintains and repairs equipment and devices used in research.

Electronics Technician & Technologist 5

In maintenance, acts as a shift supervisor or a lead-hand for technicians at level 4 and/or lower involved with the maintenance of a variety of equipment and systems;

OR

in construction, installs, in the field, a large variety of equipment and systems;

OR

in research, design or development, plans and performs non-routine assignments that require the application of a narrow range of electronic principles in support of research and/or development.

Electronics Technician & Technologist 6

In maintenance, coordinates and supervises the maintenance of comprehensive range of electronic equipment and systems, usually through subordinate supervisors and lead-hands;

OR

in a staff function, inspects electronic systems to ensure that maintenance procedures and standards are followed, and resolves unusual technical problems;

OR

in construction, acts as a project supervisor for the installation of various systems in a specialty such as radar, marine, navigation aids, communications or control systems;

OR

in research, design or development, plans and performs research and/or development projects assigned in terms of specific objectives which may require significant modifications to instrument, equipment and techniques; develops proposed design concepts.

Electronics Technician & Technologist 7

In maintenance and operations, directs the maintenance program of a comprehensive range of electronic equipment and manages the operations of a multiple terminal facility of a national telecommunications network for a large area;

OR

in maintenance only, plans and organizes the required maintenance of a comprehensive range of electronic equipment in a very large area such as a major metropolitan area or part of a province;

OR

in construction, plans and implements a regional installation program in a specialty such as radar, marine, navigation aids, communications or control systems. The region may cover a province or a number of smaller provinces (e.g., the Atlantic Region);

OR

in research, design or development, plans and performs, under the direction of an engineer or a scientist, independent research and/or development projects assigned in terms of project objectives.

TECHNICAL SUPPORT
(ENGINEERING & SCIENTIFIC)
From 1978

Technical Support 1

An entrance and training level for high school graduates; works under close supervision performing duties in the engineering or scientific disciplines. The duties consist of simple, routine, repetitive tasks of a technical nature requiring little or no experience.

Technical Support 2

A junior working level with continued training and development; is also considered an entrance level for graduates of post-secondary institutions; works under supervision performing a variety of standard procedures and techniques related to the scientific or engineering disciplines, operates within well established guidelines.

Technical Support 3

A full working level, under general supervision independently carries out a variety of assignments within the engineering or scientific disciplines requiring the use of standard and non-standard procedures; the work is performed within well defined practices.

Technical Support 4

A senior working level or first level of specialization; under direction, plans and carries out non-routine assignments of substantial variety and complexity requiring an understanding of related engineering or scientific theory, principles and practices; assumes complete responsibility for the analysis, decisions and recommendations required in connection with technical problems encountered.

Technical Support 5

A senior working level in a specialized field; under direction independently conducts and coordinates complex projects, devises new procedures requiring expertise in an area of specialization as well as a thorough understanding of associated technical fields to be found in the engineering or scientific disciplines.

TECHNICIAN, ENGINEERING

1972 TO 1977

Technician 1, Engineering

A training level. Under close supervision performs simple operations, following prescribed procedures and not requiring previous experience.

Technician 2, Engineering

The work at this level follows detailed procedures which are either established and repetitive or which are specified by the supervisor at the time of performance. The duties require some readily acquired skill or knowledge.

Technician 3, Engineering

Positions at this level are involved in the carrying out of standardized or prescribed operations in Testing, Data Analysis and Presentation, and Hydraulic Field Measurements requiring a limited background of knowledge of engineering methods and practices in the specialization.

Technician 4, Engineering

Positions at this level are involved in the carrying out of a variable sequence of operations in Testing, Data Analysis and Presentation, Hydraulic Field Measurements or Design that are not completely standardized or prescribed and that require a knowledge of engineering principles and practices, based on training and experience, in the specialization. A variety of standard references, guides and precedents are used to obtain the needed information and to select and adapt methods and procedures.

Technician 5, Engineering

Positions at this level are involved in the planning and carrying out of non-routine assignments of substantial variety and complexity based on specified operational plans. A background of understanding of related engineering principles and practices plus intensive training and diversified experience in the field of activity is required for positions at this level. Assignments are performed in Testing, Data Analysis and Presentation, Hydraulic Field Measurements, Design and Specification and Research and Development.

TECHNICIAN, LABORATORY

1972 To 1977

Technician 1, Laboratory

An entrance level, the duties performed involve routine or repetitive work for the purpose of acquiring familiarity with laboratory or field methods and techniques.

Technician 2, Laboratory

A working level, independently performs routine or repetitive work consisting of a variety of simple techniques and of a few standard techniques.

Technician 3, Laboratory

The work at this level is largely routine or repetitive and consists of the independent performance of a variety of standard techniques requiring some skill and judgement in their application.

Technician 4, Laboratory

The work at this level is generally non-repetitive and consists of the independent performance of complex techniques requiring substantial skill and judgement in their application.

Technician 5, Laboratory

The work at this level is characterized by the independent performance of difficult techniques which require a high degree of skill and judgement in their application.

TECHNOLOGIST, ENGINEERING

1972 To 1977

Technologist 1, Engineering

A training and junior working level for graduates of a recognized institute of technology. In training, carries out a variety of assignments involving a sequence of prescribed or standardized operations; as a junior working level, carries out a variable sequence of operations that are not completely standardized or prescribed and that require a knowledge of engineering principles and practices in the specialization.

Technologist 2, Engineering

Plans and carries out non-routine assignments of substantial variety and complexity in Testing, Data Analysis and Presentation, Hydraulic Field Measurements, Design and Specification, and Research and Development, which require an understanding of related engineering principles and practices plus intensive training and diversified experience in these fields.

Technologist 3, Engineering

Positions at this level involve duties similar in complexity to those carried out by junior level engineers, and which require the application and/or modification of a number of different basic but established engineering methods, procedures and techniques to blocks of work which are complete projects of limited scope or positions of large diverse projects.

Technologist 4, Engineering

Plans and accomplishes complete projects or studies of conventional nature, requiring the independent adaptation of engineering principles and practices in the specialization and interpretation and use of precedents.

TECHNOLOGIST, SCIENTIFIC

1972 To 1977

Technologist 1, Scientific

A training and junior working level for graduates of a recognized institute of technology. Initial assignments are chosen to provide on-the-job training in the use of standard laboratory techniques; on completion of training, assignments are carried out which involve the use of complex techniques requiring substantial skill and judgement in their application.

Technologist 2, Scientific

Plans and carries out non-routine assignments, of substantial variety and complexity in either Operations OR Research and Development, which require an understanding of related scientific theory and practice plus intensive training and experience in the field.

Technologist 3, Scientific

In Operations, assumes responsibility for the conduct of projects of relatively conventional and limited scope or for a wide range of duties requiring highly developed and specialized skills OR in Research and Development specific assignments are carried out which require significant modifications to instruments, equipment or techniques. Assignments are typically part of larger research and development projects.

Technologist 4, Scientific

In Research and Development, projects are carried out which consist of investigations of limited scope, with readily definable objectives. Existing theory and conventional approaches are applicable to most parts of the problem. Projects result in a publishable addition to scientific knowledge or the development of a new or recognizably improved product or technique.

5. OPERATIONAL CLASSES

CARPENTER, MAINTENANCE

Wage Rate Survey

Constructs and repairs wood structures and fixtures in an establishment; builds, repairs and installs structural items such as cabinets, stairs, doors, etc., using carpenter's hand and power tools; installs window glass. May mix and pour concrete to repair floors.

ELECTRICAL REPAIRER
Wage Rate Survey

Repairs, maintains and installs electrical wiring and equipment, such as motors, lighting fixtures and switching and control equipment in commercial, industrial, institutional or other establishment. May repair or replace mechanical, pneumatic, hydraulic or electronic components of electrical equipment.

LABOURER, NON-PRODUCTION

Performs unskilled, manual work associated with maintenance and other non-production activities; collects and disposes of refuse, digs and levels roads and ditches, lifts and moves materials and equipment. Excluded are similar occupations exclusively employed in the processing of a product and occupations involving regular assistance to skilled maintenance tradesmen (Trades Helpers).

STATIONARY ENGINEER
From 1977

Operates and maintains, under provincial certificate, a stationary steam, refrigeration or compressor plant (or a combination of such plants) and auxiliary equipment as: Chief in a low pressure plant of over 600 registered HP, refrigeration or compressor plant of over 400 registered HP.

STATIONARY ENGINEER; POWERMAN; STEAM ENGINEER; POWER ENGINEER
Wage Rate Survey
1972 To 1977

Operates and maintains various types of stationary engines and mechanical equipment such as boilers, pumps, compressors, motors and generators, and refrigeration, and water or industrial waste treating equipment, to provide heat, power and other utility services for buildings or industrial processes. MUST HOLD PROVINCIAL GOVERNMENT CERTIFICATE.

SALARY TRENDS IN CANADIAN INDUSTRY

Part II

Survey Findings

SALARY TRENDS IN CANADIAN INDUSTRY

PART II: SURVEY FINDINGS

The survey findings for the 24 occupational classes studied are presented in this section of the report. This study includes rates of pay applying to over 200,000 employees in each of the years 1977 to 1982.

Rates of pay reported include cost of living allowances, if applicable, but do not include other types of bonuses, isolation pay, overtime earnings, shift differentials, employee benefits or other allowances.

Presentation of Information

In order to facilitate the use of the data in this report, all tables are grouped by class. The data are presented for each class in the following tables:

Table 1:	Survey Coverage by Class - Canada
Table 2:	Survey Coverage by Class Percentage Distribution - Major Regions
Table 3:	Survey Coverage by Class Percentage Distribution - Major Industries
Table 4:	Survey Coverage by Class and Level - Canada
Table 5:	Mean and Third Quartile Annual Rates of Pay - Canada
Table 6:	Trends in Mean Annual Rates of Pay - Canada
Table 7:	Regional Differentials in Mean Rates of Pay
Table 8:	Industrial Differentials in Mean Rates of Pay
Table 9:	Occupational Differentials in Mean Annual Rates of Pay
Table 10:	Maturity Data - Number of Bachelor Graduates by Year from Graduation
Table 11:	Maturity Data Mean Annual Salaries - Years from Bachelor Graduation
Table 12:	Maturity Data - Occupational Differential
Table 13:	Maturity Data - Percentage Change in Mean Rates of Pay

For each class Tables 1 to 4 present the number of participating organizations or establishments and the number of employees for whom data on pay rates are reported in each year from 1977 through 1982. The tables also show the proportionate distribution of employees surveyed by geographic region, industrial group and, within each class, by classification level.

There are general fluctuations in the numbers of observations reported by class and level from one survey period to another. These fluctuations may be the result of changing economic conditions due to the contraction or expansion of business activities, major reorganizations or reclassifications within selected organizations or general improvements in the development of personnel information systems providing participants with the capacity to improve their survey coverage. Data presented for the Research Scientist and Electronics Technician and Technologist classes also included observations from the provincial government sample. This is a result of the historical methodology used when those particular occupational class samples were originally developed.

Tables 5 and 6 show the mean and third quartile rate measures for each class and level and the percentage changes by year, and for the mean rates, the percentage changes, where possible, over five and ten year periods.

Tables 7 and 8 present information on regional and industrial differentials. These differentials were developed to provide users with figures which reflect the tendency of rate of pay for many occupations in Canada to vary by geographical area and industrial sector. This may in part result from the wage determination practices of certain organizations which establish their rates after consideration of local labour market conditions or of rates paid in industries with which they must compete. Some of the annual fluctuations in differentials according to region or industry may result from fluctuations in survey coverage. In order to assess the impact of such year-to-year changes in coverage, users should refer to Tables 1, 2 and 3.

In this report we have introduced some changes in the industrial groupings used to bring these in line with practices in our present reports. For example, for several classes data were previously presented for Transportation, Communication and Other Utilities combined. Now we present Public Utilities information separate from Transportation and Communication data. Although such changes affect the usefulness of the data for examining trends in some industries the new format presents more disaggregated data.

However, it has not been possible to show the same industrial groupings for all classes. Data taken from the Wage Rate Survey and from the Personnel Administrators reports have different industrial presentations because of conventions agreed upon for reporting information in those surveys. Note that information on Municipal Government pay rates is included in the Service industrial grouping.

Table 9 presents occupational differentials. The mean rate for each class and level is compared with that of the working level professional engineer. This level of engineer is well represented with over 4000 observations for each year reported. The Engineer 3 has been used as the reference point to measure occupational differentials for all previous reports in this series.

Tables 10 through 13 present the rates of pay of individual employees compiled in relation to the number of years since bachelor graduation, i.e., relating salary to a prerequisite qualification and experience. This provides a characteristic of salary which can be used as a measure of trend and an indication of the career progression and overall salary pattern for a class.

Information regarding the educational qualifications of incumbents of positions matched to the survey specifications was obtained for the Economist-Statistician, Engineer, Librarian, Physical Scientist, Research Scientist, and University Teacher classes. All employees for whom degree data were reported are included in the tabulation whether or not they possessed a higher level degree. It should be noted that not all survey participants were able to supply complete educational information as requested, nor does the information relate to all the varieties of employment to which, for example, an engineering graduate might migrate.

Table 10 shows the number of employees for whom employers were able to report such degree data. Table 11 gives the mean rates of those employees by year from bachelor degree.

Table 12 presents the relationship of maturity data for each group to that of engineers for the same year in terms of an occupational differential. The relationship of the maturity data for Engineer to the mean rate for Engineer 3 is presented as an inter-year differential. Table 13 shows the percentage change in mean rates from one survey date to the next.

Trend Overview

As this report constitutes an update of the Bureau's last report on trends in rates of pay, an effort has been made to present comparable trend data as current as possible for the classes reported, while incorporating sufficient data for those classes previously studied to maintain continuity. A background to the trend data is provided by the following statistics for the years highlighted in this study.

	<u>Labour Force (2)</u>	<u>Employed(2)</u>	<u>Av. Wkly. Earnings (Indust. Comp.)(3)</u>	<u>Consumer Price Index (1981=100.0)(4)</u>
1977	10,498,000	9,648,000	\$249.95	67.9
1978	10,882,000	9,972,000	\$265.35	73.9
1979	11,207,000	10,369,000	\$288.32	80.7
1980	11,522,000	10,655,000	\$317.39	88.9
1981	11,830,000	10,933,000	\$355.28	100.0
1982	11,879,000	10,574,000	\$390.79	110.8

These figures are extracted from Statistics Canada reports, which also provide explanations and definitions of these measures. During the period 1977 to 1982, the total labour force grew by 13.2% and the number of those employed increased by 9.6%. The average weekly earnings in a composite of industries advanced from \$249.95 to \$390.79, i.e. 56.3%, while the Consumer Price Index moved from 67.9 to 110.8, i.e. 63.2%.

(2) Statistics Canada Catalogue (71-001)

(3) Statistics Canada Catalogue (72-002)

(4) Statistics Canada Catalogue (62-010)

In this study salaries are reported by class and level for over 200,000 employees each year. It should be noted that the data on scientific, professional, administrative, technical and administrative support classes are based on a relatively small proportion of the total industrial employment of these classes in comparison with the coverage available for the other classes discussed in this report. Data on the two operational classes which are derived from the Wage Rate Survey probably represent a larger proportion of the total class population in the labour market.

Salary information presented in this study reveals the following patterns by broad categories of classes based on simple averages of pay changes for the classes and levels with trend data available for the full five year period. Data from the previous report (#81-77), covering the five year period 1972 to 1977, are presented by occupational categories along with the available comparable data, again by category, within the 1977 to 1982 time frame covered by this report.

1977 TO 1982

<u>Employment Category</u>	<u>No. of Classes & Levels</u>	<u>Average Increase %</u>	<u>Lowest Increase %</u>	<u>Highest Increase %</u>
Scientific & Professional	16	68.8	37.9	89.1
Administrative	21	68.8	61.3	85.6
Technical	7	69.4	58.5	87.4
Administrative Support	20	69.7	55.4	81.3
Operational	4	64.4	60.1	71.4

Comparable data from the previous five year period, 1972 to 1977, reveals the following trends:

1972 TO 1977

<u>Employment Category</u>	<u>No. of Classes & Levels</u>	<u>Average Increase %</u>	<u>Lowest Increase %</u>	<u>Highest Increase %</u>
Scientific & Professional	11	59.9	54.8	64.5
Administrative	10	59.7	54.9	63.4
Technical	25	67.9	43.2	120.9
Office Classes	9	72.3	59.2	81.9
Operational	6	72.1	65.8	78.7

From 1972 to 1977, when average increases in rates of pay by employment category ranged from 59.7% to 72.3%, average weekly earnings based on an industrial composite increased by 67.5%. During the later period 1977 to 1982, average weekly earnings increased by 56.3%, while increases in average rates of pay by employment category ranged from 64.4% to 69.7%.

Looking at the ten year period embracing the above five year periods, the following trends emerge:

1972 TO 1982

<u>Employment Category</u>	<u>No. of Classes & Levels</u>	<u>Average Increase</u> %	<u>Lowest Increase</u> %	<u>Highest Increase</u> %
Scientific & Professional	13	169.9	122.6	185.2
Administrative	10	162.7	152.2	172.3
Technical	7	174.6	154.5	198.5
Operational	3	184.1	181.9	186.1

For these four categories, the average increases differed by up to 14.2% for the 33 classes and levels common to the ten year period from 1972 to 1982.

The average weekly earnings reported by Statistics Canada indicate an increase of 161.9% from 1972 to 1982, i.e. from \$149.22 to \$390.79. Comparable data on movement in the Consumer Price Index for the same ten-year period indicates an increase of 150.5%, i.e. 104.8 to 262.5 (1971 = 100). These measures of earnings and their trends are reported as general indicators. Earnings⁽³⁾ reported by Statistics Canada include such items as overtime, regular commissions, and bonuses, etc., which are excluded from the rates of pay by class in this study. In the framework of available data it is not possible to judge the comparability of these trends or their relationship to trends in compensation including benefits.

(3) Statistics Canada Catalogue 72-002

SECTION 1

SCIENTIFIC AND PROFESSIONAL CLASSES

Scientific and Professional Classes:

In analysing the data presented in this section, users should be aware of the following factors:

- i) In 1979, the July 1st surveys for the Architect, Chemist, Economist-Statistician and Librarian classes were replaced by the Bureau's Automated Pay Survey Program in which the effective date is August 15th for the Chemist and Economist-Statistician data included here and March 1st for the Architect and Librarian reports.
- ii) New survey specifications for Economist-Statistician encompassing seven levels were developed and used for the first time in 1982. Consequently, no trend data have been provided for 1982.
- iii) No 1982 data are included for University Teacher because of a significant change in the selection criteria used by the Bureau to extract these data from Statistics Canada's information.
- iv) Table 7, Regional Differentials in Mean Rates of Pay, is not produced for the University Teacher class since regional rates are not reported.
- v) Table 8, Industrial Differentials in Mean Rates of Pay, is not produced for the Architect, Librarian or University Teacher classes since industrial rates are not reported. The survey source data on Architect, Librarian and University Teacher were too limited to allow valid comparisons to be made.
- v) There were no reports published in 1977 and 1980 for the Architect class or in 1977 and 1979 for the Librarian class.

Trends in Survey Coverage - Canada

CLASS		Percentage Increases (Decreases)	
		No. of	No. of
		Orgs.	Empls.
		<u>%</u>	<u>%</u>
ARCHITECT	(1978 - 1982)	(9.3)	(13.4)
CHEMIST	(1977 - 1982)	(3.7)	14.7
ECONOMIST-STATISTICIAN	(1977 - 1981)	(17.6)	(18.4)
ENGINEER	(1977 - 1982)	(3.3)	33.8
LIBRARIAN	(1978 - 1982)	(4.6)	(10.6)
PHYSICAL SCIENTIST	(1977 - 1982)	(11.4)	11.4
RESEARCH SCIENTIST	(1977 - 1982)	6.4	12.7
UNIVERSITY TEACHER	(1977 - 1981)	(19.0)	(18.5)

TABLE I
SURVEY COVERAGE BY CLASS - CANADA
1977 TO 1982

SCIENTIFIC AND PROFESSIONAL CLASSES	1977		1978		1979		1980		1981		1982	
	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.
ARCHITECT	-	-	43	380	40	191	-	-	35	287	39	329
CHEMIST	54	496	58	480	51	509	52	476	54	556	52	569
ECONOMIST- STATISTICIAN	51	582	52	592	44	475	44	469	42	475	-	-
ENGINEER	151	18855	149	19598	147	20734	147	21738	144	22959	146	25221
LIBRARIAN	-	-	65	2042	-	-	61	1967	64	1935	62	1826
PHYSICAL SCIENTIST	44	1681	37	1334	37	1341	38	1578	41	1929	39	1873
RESEARCH SCIENTIST	47	1546	45	1480	39	1273	46	1442	51	1688	50	1743
UNIVERSITY TEACHER	21	13617	21	13662	22	14786	18	12113	17	11104	-	-

Note: 1) University Teacher - 1977 and 1978 data are based on 21 universities compared to 22 universities in 1979, 18 universities in 1980 and 17 universities in 1981.

TABLE 2
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR REGIONS
1977 TO 1982

SCIENTIFIC AND PROFESSIONAL CLASSES	ATLANTIC PROVINCES						QUEBEC					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
ARCHITECT	-	3.7	5.2	-	2.4	6.7	-	34.5	33.5	-	28.2	40.1
CHEMIST	3.6	4.6	4.5	3.6	3.6	2.8	25.8	23.9	29.1	31.3	32.4	29.5
ECONOMIST-STATISTICIAN	0.3	0.3	0.2	0.4	0.6	-	27.3	35.3	31.8	32.4	31.4	-
ENGINEER	4.2	4.2	3.5	3.8	3.8	3.0	25.3	24.9	25.2	24.9	24.7	23.0
LIBRARIAN	-	6.9	-	6.8	5.2	7.5	-	17.4	-	18.0	17.1	18.7
PHYSICAL SCIENTIST	5.8	0.8	1.8	2.0	1.7	2.0	3.2	2.5	3.1	2.8	3.7	4.0
RESEARCH SCIENTIST	1.9	2.6	2.8	3.9	3.2	3.7	25.0	20.3	19.8	23.3	21.0	23.3

	ONTARIO						PRAIRIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
ARCHITECT	-	28.4	32.5	-	41.8	24.0	-	15.2	9.9	-	10.5	14.3
CHEMIST	57.7	54.2	52.8	47.3	47.8	51.2	7.1	8.3	8.3	11.1	9.5	9.5
ECONOMIST-STATISTICIAN	58.1	45.3	52.6	53.3	53.0	-	8.3	13.4	8.2	9.0	9.3	-
ENGINEER	46.2	45.2	45.7	44.6	41.7	44.2	14.4	15.7	15.3	16.3	20.1	20.7
LIBRARIAN	-	40.3	-	40.5	38.7	38.9	-	20.8	-	20.5	23.0	24.9
PHYSICAL SCIENTIST	14.9	14.6	14.7	17.6	15.0	12.6	69.6	74.4	73.8	70.5	73.3	75.8
RESEARCH SCIENTIST	51.5	64.0	61.8	59.6	59.3	58.8	14.3	6.6	8.6	6.4	11.0	11.0

	BRITISH COLUMBIA					
	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%
ARCHITECT	-	18.2	18.9	-	16.7	14.9
CHEMIST	5.8	5.2	5.3	6.7	6.7	7.0
ECONOMIST-STATISTICIAN	6.0	5.7	7.2	4.9	5.7	-
ENGINEER	9.9	10.0	10.3	10.4	9.7	9.1
LIBRARIAN	-	14.6	-	14.2	16.1	10.0
PHYSICAL SCIENTIST	6.5	7.7	6.6	7.1	6.3	5.6
RESEARCH SCIENTIST	7.3	6.5	7.0	6.8	5.5	3.2

Note: 1) Distribution by Region not produced for University Teacher

TABLE 3
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR INDUSTRIES
1977 TO 1982

SCIENTIFIC AND PROFESSIONAL CLASSES	MINING						MANUFACTURING					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CHEMIST	11.1	7.3	5.5	9.6	5.9	5.8	70.0	75.2	80.7	74.4	77.2	74.7
ECONOMIST-STATISTICIAN	3.8	4.0	4.6	4.2	4.2	-	39.2	29.1	20.8	19.2	18.1	-
ENGINEER	7.6	8.0	7.0	7.2	8.8	9.1	40.9	36.0	35.8	36.9	36.5	36.3
PHYSICAL SCIENTIST	50.2	55.4	53.2	53.0	49.2	48.8	27.1	31.0	33.0	34.3	28.9	25.9
RESEARCH SCIENTIST	3.5	3.8	3.1	4.3	3.5	3.7	39.8	31.4	28.1	31.6	34.2	33.8
	TRANSPORTATION AND COMMUNICATIONS						PUBLIC UTILITIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CHEMIST	10.3	8.5	1.0	1.5	1.3	0.7	(a)	(a)	7.9	8.0	8.6	9.1
ECONOMIST-STATISTICIAN	22.9	28.9	21.3	19.2	21.9	-	(a)	(a)	11.6	16.2	15.4	-
ENGINEER	11.3	11.0	11.4	11.0	9.8	9.4	24.3	25.2	24.2	23.2	24.2	24.3
PHYSICAL SCIENTIST	2.2	-	-	-	-	-	(a)	9.5	9.3	8.3	7.3	7.2
RESEARCH SCIENTIST	-	-	-	-	-	-	7.3	16.5	19.1	16.1	18.3	19.7
	TRADE						FINANCE AND INSURANCE					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CHEMIST	1.2	-	4.9	-	-	-	-	-	-	-	-	-
ECONOMIST-STATISTICIAN	-	-	-	-	-	-	28.3	26.5	31.2	30.3	28.0	-
ENGINEER	0.6	(b)	(b)	(b)	(b)	(b)	0.1	0.1(b)	0.1(b)	0.1(b)	0.1(b)	0.1(b)
PHYSICAL SCIENTIST	-	-	-	-	-	-	-	-	-	-	-	-
RESEARCH SCIENTIST	0.1	-	-	-	-	-	-	-	-	-	-	-
	SERVICE											
	1977	1978	1979	1980	1981	1982						
	%	%	%	%	%	%						
CHEMIST	6.8	9.0	4.9	6.5	7.0	9.7						
ECONOMIST-STATISTICIAN	5.8	11.5	10.5	10.9	12.4	-						
ENGINEER	15.3	19.7	21.5	21.6	20.6	20.8						
PHYSICAL SCIENTIST	20.5	4.1	4.5	4.4	14.6	18.1						
RESEARCH SCIENTIST	49.3	48.3	49.7	48.0	44.0	42.8						

(a) Transportation, Communications and Public Utilities combined

(b) Trade, Finance and Insurance combined

Note: 1) Distribution by Industry not produced for Architect, Librarian or University Teacher.

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1978 TO 1982

ARCHITECT	1978		1979		1981		1982	
	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>
LEVEL 1	34	9.0	12	6.3	35	12.2	27	8.2
LEVEL 2	65	17.1	38	19.9	41	14.3	48	14.6
LEVEL 3	83	21.8	54	28.3	89	31.0	88	26.7
LEVEL 4	97	25.5	45	23.6	58	20.2	64	19.5
LEVEL 5	61	16.1	23	12.0	41	14.3	66	20.1
LEVEL 6	40	10.5	19	9.9	23	8.0	36	10.9
TOTAL	380	100.0	191	100.0	287	100.0	329	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1978 TO 1982

ARCHITECT	1978		1979		1981		1982	
	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%
LEVEL 1	15860	-	15729	11.8	16512	-	19107	15.7
LEVEL 2	20379	-	19842	7.7	21501	-	25415	18.2
LEVEL 3	23855	-	26229	11.1	30341	-	31719	4.5
LEVEL 4	27818	-	28020	5.7	32091	-	37690	17.4
LEVEL 5	28908	-	31012	9.8	35080	-	40033	14.1
LEVEL 6	33681	-	35058	6.1	42070	-	49376	17.4
	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
LEVEL 1	17063	-	17416	21.2	18200	-	22800	25.3
LEVEL 2	23532	-	22284	4.9	23668	-	30601	29.3
LEVEL 3	26858	-	30367	10.0	37443	-	35900	(4.1)
LEVEL 4	32749	-	32686	9.6	36832	-	42376	15.1
LEVEL 5	31087	-	36713	14.7	42404	-	46362	9.3
LEVEL 6	35724	-	39600	11.9	46704	-	56956	12.4

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

ARCHITECT	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	1972 TO 1976(a)	1978 TO 1982	1972 TO 1982
	<u>%</u>	<u>%</u>	<u>%</u>
LEVEL 1	53.6	20.5	122.6
LEVEL 2	44.2	24.7	139.9
LEVEL 3	40.8	33.0	137.5
LEVEL 4	51.6	35.5	148.6
LEVEL 5	45.3	38.5	125.4
LEVEL 6	37.1	46.6	136.7

(a) No report for Architect in 1977.

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1978 TO 1982

ARCHITECT	1978 %	1979 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>				
LEVEL 1	*	*	-	*
LEVEL 2	*	*	-	*
LEVEL 3	*	*	*	*
LEVEL 4	86.6	*	*	*
LEVEL 5	*	-	*	*
LEVEL 6	*	-	-	*
<u>QUEBEC</u>				
LEVEL 1	*	*	-	*
LEVEL 2	112.4	126.6	128.5	104.6
LEVEL 3	108.5	107.3	115.6	110.4
LEVEL 4	114.9	121.1	120.5	110.1
LEVEL 5	127.2	123.7	128.1	104.6
LEVEL 6	*	113.8	111.7	107.9
<u>ONTARIO</u>				
LEVEL 1	*	*	95.9	93.4
LEVEL 2	74.5	87.1	89.5	98.6
LEVEL 3	89.4	85.6	85.2	91.4
LEVEL 4	93.1	95.8	97.5	96.5
LEVEL 5	96.2	81.8	84.3	92.5
LEVEL 6	99.9	98.2	102.7	95.8
<u>PRAIRIES</u>				
LEVEL 1	*	*	*	*
LEVEL 2	109.0	*	-	*
LEVEL 3	94.1	107.3	97.1	100.1
LEVEL 4	93.0	100.3	95.4	95.4
LEVEL 5	105.7	89.6	89.2	108.8
LEVEL 6	101.6	94.0	*	*
<u>BRITISH COLUMBIA</u>				
LEVEL 1	*	*	117.2	*
LEVEL 2	87.2	94.3	105.3	*
LEVEL 3	94.5	85.1	84.3	94.4
LEVEL 4	90.3	92.7	93.7	101.4
LEVEL 5	96.5	100.6	*	93.9
LEVEL 6	94.3	*	*	*

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1978 TO 1982

ARCHITECT	1978 %	1979 %	1981 %	1982 %
LEVEL 1	67.1	60.8	50.8	52.4
LEVEL 2	86.2	76.7	66.1	69.7
LEVEL 3	100.9	101.4	93.3	87.0
LEVEL 4	117.6	108.3	98.6	103.4
LEVEL 5	122.2	119.8	107.8	109.8
LEVEL 6	142.4	135.5	129.3	135.4
MEAN RATE ENGINEER 3	\$23647	\$25878	\$32535	\$36463

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

CHEMIST	1977		1978		1979		1980		1981		1982	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
LEVEL 1	156	31.4	177	36.9	154	30.3	156	32.8	199	35.8	189	33.2
LEVEL 2	210	42.3	185	38.5	199	39.1	217	45.6	237	42.6	256	45.0
LEVEL 3	97	19.6	90	18.8	109	21.4	81	17.0	101	18.2	105	18.5
LEVEL 4	33	6.7	28	5.8	47	9.2	22	4.6	19	3.4	19	3.3
TOTAL	496	100.0	480	100.0	509	100.0	476	100.0	556	100.0	569	100.0

TABLE 5
MEAN AND THIRD QUANTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

CHEMIST	1977		1978		1979		1980		1981		1982	
	MEAN	\$	MEAN	\$	MEAN	\$	MEAN	\$	MEAN	\$	MEAN	\$
			%		%		%		%		%	
LEVEL 1	16828		0.4	18637	10.3	20598	10.5	22603	9.7	25467	12.7	
LEVEL 2	22080		2.2	24420	8.2	26677	9.2	30190	13.2	33351	10.5	
LEVEL 3	26049		5.8	29411	6.7	32369	10.1	36682	13.3	41713	13.7	
LEVEL 4	30493		10.5	35818	6.3	38723	8.1	43453	12.2	47515	9.3	
				Q-3	%	Q-3	%	Q-3	%	Q-3	%	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
LEVEL 1	18175		2.8	20400	9.1	23014	12.8	25380	10.3	27522	8.4	
LEVEL 2	24624		4.3	27456	6.9	29903	8.9	33982	13.6	37920	11.6	
LEVEL 3	30014		6.0	32466	2.1	36456	12.3	42180	15.7	47592	12.8	
LEVEL 4	33560		13.2	39060	2.8	42297	8.3	47040	11.2	52400	11.4	

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1973 TO 1982

CHEMIST	FIVE YEAR PERIOD		TEN YEAR PERIOD	
	PERCENTAGE INCREASE		PERCENTAGE INCREASE	
	<u>1973 TO 1977(a)</u>	<u>1977 TO 1982</u>	<u>1973 TO 1982</u>	
	%	%	%	
LEVEL 1	45.8	51.3	120.6	
LEVEL 2	53.0	51.0	131.9	
LEVEL 3	55.5	60.1	149.0	
LEVEL 4	48.2	55.8	130.9	

(a) No report for Chemist in 1972.

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

CHEMISTS	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%

ATLANTIC PROVINCES

LEVEL 1	97.6	97.0	98.6	*	*	*
LEVEL 2	92.5	93.0	102.4	101.9	102.6	105.7
LEVEL 3	100.5	97.0	99.9	101.2	101.5	*
LEVEL 4	*	*	*	*	*	*

QUEBEC

LEVEL 1	91.9	96.5	94.1	90.5	95.7	92.3
LEVEL 2	88.3	90.5	91.0	89.6	92.2	88.5
LEVEL 3	84.4	85.7	86.4	86.9	86.1	85.1
LEVEL 4	90.4	88.2	83.7	90.3	89.2	90.0

ONTARIO

LEVEL 1	101.5	98.2	99.6	99.6	99.7	99.4
LEVEL 2	104.2	102.1	104.2	104.0	101.5	104.0
LEVEL 3	105.2	104.1	103.9	99.9	102.6	106.3
LEVEL 4	103.7	106.6	104.3	105.5	101.1	101.9

PRAIRIES

LEVEL 1	108.2	101.9	104.9	117.5	105.8	115.8
LEVEL 2	95.9	105.9	101.6	106.2	115.4	106.3
LEVEL 3	102.1	101.8	102.7	111.3	110.7	108.8
LEVEL 4	-	*	*	*	*	*

BRITISH COLUMBIA

LEVEL 1	124.7	135.3	127.3	121.8	119.8	114.0
LEVEL 2	115.5	115.3	117.2	115.9	109.5	112.1
LEVEL 3	113.5	117.0	118.2	115.1	108.7	104.6
LEVEL 4	*	-	*	*	-	-

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

CHEMIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
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MINING

LEVEL 1	*	113.9	*	*	*	*
LEVEL 2	96.5	*	93.6	104.2	110.1	101.3
LEVEL 3	93.3	*	96.3	101.2	97.5	97.4
LEVEL 4	*	*	*	*	*	*

MANUFACTURING

LEVEL 1	94.6	95.4	98.0	97.2	98.1	96.4
LEVEL 2	98.6	97.5	98.3	96.8	96.5	95.9
LEVEL 3	99.9	98.0	96.4	95.9	95.2	96.3
LEVEL 4	101.4	101.4	100.3	99.1	99.4	102.0

TRANSPORTATION & COMMUNICATION

LEVEL 1	*	*	-	-	-	-
LEVEL 2	*	*	*	*	*	*
LEVEL 3	-	-	-	-	-	-
LEVEL 4	-	-	-	-	-	-

PUBLIC UTILITIES & TRADE

LEVEL 1	120.5	*	*	*	*	*
LEVEL 2	116.6	116.6	116.2	118.2	116.0	122.9
LEVEL 3	*	116.7	*	*	121.4	120.5
LEVEL 4	*	*	*	*	-	-

SERVICE

LEVEL 1	*	111.7	102.8	101.4	114.5	112.1
LEVEL 2	*	110.5	104.2	98.8	98.0	100.4
LEVEL 3	*	*	*	*	105.2	98.9
LEVEL 4	*	*	*	-	*	*

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

CHEMIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 1	75.5	71.5	72.0	72.1	69.5	69.8
LEVEL 2	101.8	95.4	94.4	93.3	92.8	91.5
LEVEL 3	117.3	116.6	113.7	113.3	112.7	114.4
LEVEL 4	133.4	142.5	138.4	135.5	133.6	130.3
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1981

ECONOMIST- STATISTICIAN	1977		1978		1979		1980		1981	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
LEVEL 1	198	34.0	182	30.7	135	28.4	134	28.6	132	27.8
LEVEL 2	227	39.0	199	33.6	181	38.1	175	37.3	178	37.5
LEVEL 3	94	16.2	136	23.0	100	21.1	96	20.5	102	21.5
LEVEL 4	63	10.8	75	12.7	59	12.4	64	13.6	63	13.2
TOTAL	582	100.0	592	100.0	475	100.0	469	100.0	475	100.0

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Source: Pay Research Bureau

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1981

ECONOMIST- STATISTICIAN	1977	1978		1979		1980		1981	
	MEAN \$	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%
LEVEL 1	19181	20575	7.3	21056	2.3	23192	10.1	26227	13.1
LEVEL 2	25165	26091	3.7	27953	7.1	31284	11.9	34997	11.9
LEVEL 3	32221	33049	2.6	34209	3.5	38644	13.0	43572	12.8
LEVEL 4	38526	39628	2.9	41949	5.9	46466	10.8	52530	13.1
	Q-3 \$	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
LEVEL 1	21000	22394	6.6	23500	4.9	25589	8.9	29486	15.2
LEVEL 2	27500	28992	5.4	31298	8.0	34600	10.6	39000	12.7
LEVEL 3	35503	36069	1.6	36921	2.4	42425	14.9	47181	11.2
LEVEL 4	41500	43272	4.3	43000	(0.6)	49286	14.6	58428	18.5

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1981

ECONOMIST- STATISTICIAN	FIVE YEAR PERIOD PERCENTAGE INCREASE		TEN YEAR PERIOD PERCENTAGE INCREASE	
	<u>1972 TO 1977</u> %	<u>1977 TO 1981(a)</u> %	<u>1972 TO 1981(a)</u> %	
LEVEL 1	58.7	36.7	117.0	
LEVEL 2	56.4	39.1	117.6	
LEVEL 3	61.7	35.2	118.7	
LEVEL 4	54.8	36.3	111.1	

(a) Change in survey specifications for Economist-Statistician in 1982.

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1981

ECONOMIST- STATISTICIAN	1977 %	1978 %	1979 %	1980 %	1981 %
<u>ATLANTIC PROVINCES</u>					
LEVEL 1	*	*	-	*	*
LEVEL 2	-	*	*	*	*
LEVEL 3	-	-	-	-	-
LEVEL 4	*	-	-	-	-
<u>QUEBEC</u>					
LEVEL 1	101.3	103.4	102.1	97.7	97.2
LEVEL 2	94.5	96.2	96.9	98.2	97.0
LEVEL 3	96.2	91.0	95.3	97.2	95.9
LEVEL 4	99.4	96.4	98.7	99.8	91.2
<u>ONTARIO</u>					
LEVEL 1	99.0	95.3	96.8	100.1	102.2
LEVEL 2	101.9	100.7	100.3	99.5	98.8
LEVEL 3	100.8	102.9	100.5	100.1	101.7
LEVEL 4	99.3	103.0	99.8	98.7	103.9
<u>PRAIRIES</u>					
LEVEL 1	106.3	102.2	110.6	109.9	99.0
LEVEL 2	104.4	109.7	110.3	107.2	112.5
LEVEL 3	118.4	115.6	125.8	122.6	*
LEVEL 4	108.6	105.2	111.8	116.5	108.0
<u>BRITISH COLUMBIA</u>					
LEVEL 1	94.7	102.4	92.7	*	*
LEVEL 2	95.2	94.1	100.4	*	96.7
LEVEL 3	91.4	96.2	93.9	95.1	97.3
LEVEL 4	*	*	*	*	*

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1981

ECONOMIST- STATISTICIAN	1977 %	1978 %	1979 %	1980 %	1981 %
<u>MINING</u>					
LEVEL 1	*	100.6	97.9	*	*
LEVEL 2	104.2	113.0	*	*	105.8
LEVEL 3	104.8	111.9	111.0	101.3	*
LEVEL 4	*	*	*	*	*
<u>MANUFACTURING</u>					
LEVEL 1	108.6	105.9	111.5	110.7	119.4
LEVEL 2	108.8	107.5	110.8	109.1	113.4
LEVEL 3	106.8	110.8	119.3	116.3	123.2
LEVEL 4	111.7	117.1	131.0	127.9	131.7
<u>TRANSPORTATION & COMMUNICATION</u>					
LEVEL 1	100.3(a)	99.5	101.5	100.0	100.7
LEVEL 2	96.0(a)	91.6	92.7	93.4	91.8
LEVEL 3	95.3(a)	84.9	86.3	91.0	90.9
LEVEL 4	92.9(a)	91.0	92.7	97.7	85.9
<u>PUBLIC UTILITIES</u>					
LEVEL 1	(a)	117.2	109.3	112.9	115.0
LEVEL 2	(a)	101.0	99.8	103.4	105.4
LEVEL 3	(a)	*	*	*	106.5
LEVEL 4	(a)	*	*	*	*
<u>FINANCE & INSURANCE</u>					
LEVEL 1	85.7	91.3	92.1	92.1	88.1
LEVEL 2	92.3	96.1	94.7	92.8	86.7
LEVEL 3	95.5	96.3	97.4	96.2	93.0
LEVEL 4	98.9	98.7	96.6	94.6	91.2
<u>SERVICE</u>					
LEVEL 1	87.4	85.7	88.3	84.4	89.3
LEVEL 2	85.7	93.4	95.1	96.9	99.4
LEVEL 3	89.8	100.1	94.3	93.3	*
LEVEL 4	84.2	90.2	92.4	90.7	89.5

(a) Transportation, Communications and Public Utilities combined

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1981

ECONOMIST- STATISTICIAN	1977 %	1978 %	1979 %	1980 %	1981 %
LEVEL 1	86.4	87.0	81.4	81.1	80.6
LEVEL 2	113.4	110.3	108.0	109.5	107.6
LEVEL 3	145.2	139.8	132.2	135.2	133.9
LEVEL 4	173.6	167.6	162.1	162.6	161.5
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535

TABLE 10
MATURITY DATA
NUMBER OF BACHELOR GRADUATES
BY YEAR FROM GRADUATION
1977 TO 1981

ECONOMIST- STATISTICIAN	NUMBER OF BACHELOR GRADUATES				
	1977	1978	1979	1980	1981
+00 YEAR	*	-	*	-	-
01 YEAR	*	*	*	*	*
02 YEARS	11	6	11	5	7
03 YEARS	20	12	10	17	14
04 YEARS	28	15	16	10	18
05 YEARS	30	18	15	17	12
06 YEARS	24	16	13	17	21
07 YEARS	37	18	15	13	20
08 YEARS	40	22	17	18	15
09 YEARS	26	28	16	20	14
10 YEARS	23	25	19	15	23
11 YEARS	26	13	21	14	10
12 YEARS	24	23	15	13	11
13 YEARS	12	15	8	18	11
14 YEARS	20	12	8	8	19
15 YEARS	12	18	8	10	7
16 YEARS	8	6	9	11	5
17 YEARS	10	5	*	8	6
18 YEARS	13	5	*	-	7
19 YEARS	9	9	*	*	*
20 YEARS	9	-	8	*	*
21 YEARS	-	-	-	7	*
22 YEARS	-	-	-	*	5
23 YEARS	-	-	-	*	*
24 YEARS	-	-	-	*	*
25 YEARS	-	-	-	*	*
26 YEARS	-	-	-	*	*
27 YEARS	-	-	-	*	*
28 YEARS	-	-	-	5	*
29 YEARS	-	-	-	*	*
30 YEARS	-	-	-	*	6
31 YEARS	-	-	-	*	*
32 YEARS	-	-	-	*	*
33 YEARS	-	-	-	-	*
34 YEARS	-	-	-	*	*
35 YEARS	-	-	-	*	*
36 YEARS	-	-	-	*	*
37 YEARS	-	-	-	-	*
38 YEARS	-	-	-	-	-
39 YEARS	-	-	-	-	-
40 YEARS	-	-	-	-	-

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR

TABLE 11
MATURITY DATA
MEAN ANNUAL SALARIES
YEARS FROM BACHELOR GRADUATION
1977 TO 1981

ECONOMIST- STATISTICIAN	1977 \$	1978 \$	1979 \$	1980 \$	1981 \$
+00 YEAR	*	-	*	-	-
01 YEAR	*	*	*	*	*
02 YEARS	15573	19771	17516	17227	25074
03 YEARS	17449	17761	19318	22377	24911
04 YEARS	18539	19399	20361	22957	26525
05 YEARS	19634	20355	22678	24453	27699
06 YEARS	22359	21974	23391	26405	29891
07 YEARS	23598	26116	24776	28376	33159
08 YEARS	22984	25500	28979	30449	34468
09 YEARS	26331	25404	29218	32639	37297
10 YEARS	26311	28836	28186	34316	39464
11 YEARS	26763	29615	32601	30873	41042
12 YEARS	27026	30266	32563	35518	38650
13 YEARS	29763	33291	32443	38137	39266
14 YEARS	33316	33544	36925	35709	44052
15 YEARS	34349	33363	36314	39185	45194
16 YEARS	32480	37385	33718	41213	47310
17 YEARS	32052	39042	*	40554	41040
18 YEARS	31671	35148	*	-	43664
19 YEARS	36330	34585	*	*	*
20 YEARS	33029	-	34557	*	*
21 YEARS	-	-	-	39469	*
22 YEARS	-	-	-	*	54186
23 YEARS	-	-	-	*	*
24 YEARS	-	-	-	*	*
25 YEARS	-	-	-	*	*
26 YEARS	-	-	-	*	*
27 YEARS	-	-	-	*	*
28 YEARS	-	-	-	45652	*
29 YEARS	-	-	-	*	*
30 YEARS	-	-	-	*	55420
31 YEARS	-	-	-	*	*
32 YEARS	-	-	-	*	*
33 YEARS	-	-	-	-	*
34 YEARS	-	-	-	*	-
35 YEARS	-	-	-	*	*
36 YEARS	-	-	-	*	*
37 YEARS	-	-	-	-	*
38 YEARS	-	-	-	-	-
39 YEARS	-	-	-	-	-
40 YEARS	-	-	-	-	-

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 12
MATURITY DATA
OCCUPATIONAL DIFFERENTIAL
ENGINEER = 100%
1977 TO 1981

ECONOMIST - STATISTICIAN	1977 %	1978 %	1979 %	1980 %	1981 %
+00 YEAR	*	-	*	-	-
01 YEAR	*	*	*	*	*
02 YEARS	93.9	111.6	90.0	77.8	96.8
03 YEARS	97.0	93.0	91.5	94.5	89.4
04 YEARS	97.5	94.9	90.4	90.6	89.8
05 YEARS	97.1	94.7	94.8	92.1	88.7
06 YEARS	103.8	96.7	93.5	93.8	91.9
07 YEARS	104.5	108.5	94.8	96.8	97.7
08 YEARS	97.5	101.4	106.7	100.7	96.6
09 YEARS	108.6	98.0	104.1	103.1	101.4
10 YEARS	105.6	106.9	96.7	106.4	103.1
11 YEARS	104.5	108.9	109.1	92.4	104.8
12 YEARS	103.1	108.1	107.2	103.6	96.7
13 YEARS	113.3	116.1	103.2	109.8	96.4
14 YEARS	123.8	116.2	116.0	99.5	106.7
15 YEARS	123.3	113.5	113.9	108.7	106.5
16 YEARS	115.3	123.3	104.5	114.2	113.2
17 YEARS	115.4	128.1	*	110.1	97.0
18 YEARS	111.0	115.5	*	-	102.7
19 YEARS	123.8	111.7	*	*	*
20 YEARS	112.1	-	102.2	*	*
21 YEARS	-	-	-	103.4	*
22 YEARS	-	-	-	*	121.7
23 YEARS	-	-	-	*	*
24 YEARS	-	-	-	*	*
25 YEARS	-	-	-	*	*
26 YEARS	-	-	-	*	*
27 YEARS	-	-	-	*	*
28 YEARS	-	-	-	118.4	*
29 YEARS	-	-	-	*	*
30 YEARS	-	-	-	*	125.1
31 YEARS	-	-	-	*	*
32 YEARS	-	-	-	*	*
33 YEARS	-	-	-	-	*
34 YEARS	-	-	-	*	-
35 YEARS	-	-	-	*	*
36 YEARS	-	-	-	*	*
37 YEARS	-	-	-	-	*
38 YEARS	-	-	-	-	-
39 YEARS	-	-	-	-	-
40 YEARS	-	-	-	-	-

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 13
MATURITY DATA
PERCENTAGE CHANGE IN MEAN RATE OF PAY
YEARS FROM BACHELOR GRADUATION
1977 TO 1981

ECONOMIST- STATISTICIAN	1977	1978	1979	1980
	TO	TO	TO	TO
	1978 %	1979 %	1980 %	1981 %
+00 YEAR	-	-	-	-
01 YEAR	*	*	*	*
02 YEARS	27.0	(12.9)	(1.7)	45.6
03 YEARS	1.8	8.8	15.8	11.3
04 YEARS	4.6	5.0	12.8	15.5
05 YEARS	3.7	11.4	7.8	13.3
06 YEARS	(1.8)	6.5	12.9	13.2
07 YEARS	10.7	(5.4)	14.5	16.9
08 YEARS	11.0	13.6	5.1	13.2
09 YEARS	(3.7)	15.0	11.7	14.3
10 YEARS	9.6	(2.3)	21.8	15.0
11 YEARS	10.7	10.1	(5.6)	32.9
12 YEARS	12.0	7.6	9.1	8.8
13 YEARS	11.9	(2.6)	17.6	3.0
14 YEARS	0.7	10.1	(3.4)	23.4
15 YEARS	(3.0)	8.9	7.9	15.3
16 YEARS	15.1	10.9	22.2	14.8
17 YEARS	21.8	*	*	1.2
18 YEARS	11.0	*	-	*
19 YEARS	(5.1)	*	*	*
20 YEARS	-	-	*	*
21 YEARS	-	-	-	*
22 YEARS	-	-	-	*
23 YEARS	-	-	-	*
24 YEARS	-	-	-	*
25 YEARS	-	-	-	*

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

ENGINEER	1977		1978		1979		1980		1981		1982	
	NO.OF	% OF	NO.OF	% OF	NO.OF	% OF	NO.OF	% OF	NO.OF	% OF	NO.OF	% OF
	OBS.	TOTAL	OBS.	TOTAL	OBS.	TOTAL	OBS.	TOTAL	OBS.	TOTAL	OBS.	TOTAL
LEVEL 1	1988	10.6	2126	10.9	2405	11.6	2563	11.8	2728	11.9	2928	11.6
LEVEL 2	2872	15.2	3042	15.5	2979	14.4	2747	12.6	3213	14.0	3774	15.0
LEVEL 3	4903	26.0	4898	25.0	5256	25.3	5528	25.4	5368	23.4	5760	22.8
LEVEL 4	4941	26.2	5097	26.0	5505	26.5	6031	27.7	6462	28.1	6990	27.7
LEVEL 5	2884	15.3	3085	15.7	3184	15.4	3423	15.8	3589	15.6	3970	15.8
LEVEL 6	1267	6.7	1350	6.9	1405	6.8	1446	6.7	1599	7.0	1799	7.1
TOTAL	18855	100.0	19598	100.0	20734	100.0	21738	100.0	22959	100.0	25221	100.0

TABLE 5
MEAN AND THIRD QUANTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

ENGINEER	1977		1978		1979		1980		1981		1982	
	MEAN	\$	MEAN	%	MEAN	%	MEAN	%	MEAN	%	MEAN	%
LEVEL 1	15353		16340	6.4	17751	8.6	20089	13.2	23175	15.4	26809	15.7
LEVEL 2	18311		19758	7.9	21540	9.0	23867	10.8	27314	14.4	30993	13.5
LEVEL 3	22196		23647	6.5	25878	9.4	28580	10.4	32535	13.8	36463	12.1
LEVEL 4	26368		28160	6.8	30708	9.0	33984	10.7	38787	14.1	43730	12.7
LEVEL 5	30682		32998	7.5	35937	8.9	39958	11.2	45761	14.5	51549	12.6
LEVEL 6	34794		37474	7.7	40325	7.6	44993	11.6	51954	15.5	58486	12.6
LEVEL 1	16000	Q-3	17220	7.6	18720	8.7	21320	13.9	24540	15.1	28512	16.2
LEVEL 2	19671	Q-3	21294	8.3	23286	9.4	25600	9.9	29172	14.0	33384	14.4
LEVEL 3	23900	Q-3	25500	6.7	27812	9.1	30480	9.6	34964	14.7	39180	12.1
LEVEL 4	28200	Q-3	30000	6.4	32724	9.1	36108	10.3	41672	15.4	47040	12.9
LEVEL 5	32716	Q-3	35308	7.9	38400	8.8	42280	10.1	48600	14.9	55215	13.6
LEVEL 6	37140	Q-3	40404	8.8	43416	7.5	48780	12.4	56000	14.8	63476	13.4

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

ENGINEER	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	<u>1972 TO 1977</u>	<u>1977 TO 1982</u>	<u>1972 TO 1982</u>
	%	%	%
LEVEL 1	63.3	74.6	185.2
LEVEL 2	60.0	69.3	170.8
LEVEL 3	57.7	64.3	159.1
LEVEL 4	59.2	65.8	164.1
LEVEL 5	64.5	68.0	176.4
LEVEL 6	63.6	68.1	175.0

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

ENGINEER	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
LEVEL 1	95.2	96.4	94.3	94.6	93.6	93.9
LEVEL 2	97.1	95.0	92.7	93.0	93.6	92.5
LEVEL 3	95.9	95.6	93.0	93.1	92.7	93.7
LEVEL 4	95.9	96.0	93.3	93.1	91.7	92.6
LEVEL 5	95.0	93.7	91.5	91.4	92.3	92.5
LEVEL 6	97.1	95.3	94.3	94.0	89.7	89.5
<u>QUEBEC</u>						
LEVEL 1	97.5	96.3	98.3	96.5	97.2	94.2
LEVEL 2	96.3	96.4	97.0	95.5	96.6	93.0
LEVEL 3	94.6	94.6	98.5	95.8	96.4	92.7
LEVEL 4	96.1	96.2	98.7	97.3	98.0	96.4
LEVEL 5	95.1	95.2	97.9	96.8	96.9	95.8
LEVEL 6	96.7	96.8	99.1	98.6	97.3	95.6
<u>ONTARIO</u>						
LEVEL 1	101.6	101.8	100.9	101.6	98.3	99.4
LEVEL 2	102.1	101.8	101.6	102.2	100.3	100.5
LEVEL 3	100.5	100.9	99.4	99.8	98.4	99.2
LEVEL 4	99.9	99.9	99.4	99.8	98.1	99.1
LEVEL 5	102.5	100.8	100.4	100.1	98.5	99.4
LEVEL 6	102.8	101.5	100.5	99.7	97.6	98.3
<u>PRAIRIES</u>						
LEVEL 1	98.3	99.7	101.2	102.0	104.8	105.0
LEVEL 2	97.1	99.2	99.7	100.3	102.7	105.5
LEVEL 3	99.4	100.5	99.0	101.5	104.1	107.1
LEVEL 4	101.1	102.3	99.4	101.9	106.0	107.2
LEVEL 5	103.1	101.1	99.2	100.7	105.0	106.3
LEVEL 6	100.8	102.1	100.4	102.9	106.3	108.9
<u>BRITISH COLUMBIA</u>						
LEVEL 1	107.8	109.5	100.7	101.4	103.1	100.6
LEVEL 2	106.1	105.6	105.9	106.1	104.9	102.1
LEVEL 3	111.1	107.9	108.1	108.7	109.0	106.5
LEVEL 4	109.2	107.4	107.5	106.9	105.8	103.5
LEVEL 5	100.4	107.6	107.5	107.6	107.0	103.5
LEVEL 6	100.0	105.2	104.0	102.1	103.5	100.7

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

ENGINEER	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
LEVEL 1	105.6	100.4	102.3	103.5	106.5	106.3
LEVEL 2	101.2	97.9	101.7	101.0	103.9	106.3
LEVEL 3	97.9	96.6	96.9	99.9	102.5	105.0
LEVEL 4	97.6	98.9	97.0	99.8	104.9	107.6
LEVEL 5	98.3	96.6	97.5	98.9	104.3	103.1
LEVEL 6	100.9	98.8	103.2	105.0	106.4	109.1
<u>MANUFACTURING</u>						
LEVEL 1	98.4	99.0	98.1	99.6	98.9	98.5
LEVEL 2	96.8	97.7	97.7	98.9	97.3	96.0
LEVEL 3	95.9	97.4	96.9	98.0	96.7	96.7
LEVEL 4	97.1	97.6	98.1	98.1	97.2	97.4
LEVEL 5	98.2	96.9	97.0	97.0	95.9	96.5
LEVEL 6	100.4	99.7	99.3	100.0	99.4	99.1
<u>TRANSPORTATION & COMMUNICATION</u>						
LEVEL 1	93.8	95.9	96.1	94.4	95.2	97.7
LEVEL 2	98.0	99.9	99.5	96.9	97.1	97.9
LEVEL 3	100.9	101.5	100.9	99.5	99.8	100.3
LEVEL 4	95.6	95.5	94.9	96.0	94.5	94.6
LEVEL 5	97.5	94.6	94.4	95.2	93.9	93.2
LEVEL 6	99.6	98.9	98.3	97.1	92.0	92.2
<u>PUBLIC UTILITIES</u>						
LEVEL 1	103.4	101.7	105.9	103.7	99.9	101.7
LEVEL 2	108.5	106.4	106.5	104.6	104.6	106.4
LEVEL 3	107.1	105.7	106.5	104.3	104.0	102.8
LEVEL 4	108.3	107.2	107.7	103.8	103.4	103.4
LEVEL 5	106.3	108.0	107.9	106.0	104.6	104.6
LEVEL 6	105.4	108.5	106.6	106.2	102.9	103.1
<u>TRADE</u>						
LEVEL 1	*	-	-	-	-	-
LEVEL 2	*	-	-	-	-	-
LEVEL 3	*	-	-	*	*	-
LEVEL 4	*	*	-	*	*	*
LEVEL 5	-	-	-	*	*	*
LEVEL 6	*	*	*	*	*	*

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

ENGINEER	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>FINANCE & INSURANCE</u>						
LEVEL 1	-	-	-	-	-	-
LEVEL 2	-	-	*	-	-	-
LEVEL 3	-	-	*	*	*	*
LEVEL 4	*	*	*	*	*	*
LEVEL 5	*	*	*	*	*	*
LEVEL 6	*	*	*	*	*	*
<u>SERVICE</u>						
LEVEL 1	99.3	102.6	99.3	99.1	100.9	99.5
LEVEL 2	100.1	99.7	98.9	99.5	101.6	101.3
LEVEL 3	98.6	97.9	97.4	99.3	100.9	100.9
LEVEL 4	98.1	97.8	97.6	100.3	100.9	99.9
LEVEL 5	97.8	97.4	97.4	98.8	100.3	99.0
LEVEL 6	95.0	95.7	96.8	95.8	97.8	96.8

TABLE 9
LEVEL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

ENGINEER	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 1	69.2	69.1	68.6	70.3	71.2	73.5
LEVEL 2	82.5	83.6	83.2	83.5	84.0	85.0
LEVEL 4	118.8	117.2	118.7	118.9	119.2	119.9
LEVEL 5	138.2	139.5	138.9	139.8	140.7	141.4
LEVEL 6	156.8	158.5	155.8	157.4	159.7	160.4
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

TABLE 10
MATURITY DATA
NUMBER OF BACHELOR GRADUATES
BY YEAR FROM GRADUATION
1977 TO 1982

ENGINEER	NUMBER OF BACHELOR GRADUATES					
	1977	1978	1979	1980	1981	1982
+00 YEAR	353	401	524	485	608	389
01 YEAR	787	800	956	1167	1257	1415
02 YEARS	895	799	792	923	1139	1325
03 YEARS	877	891	758	822	955	1171
04 YEARS	907	878	853	797	811	1007
05 YEARS	796	835	848	797	782	838
06 YEARS	804	738	810	802	846	824
07 YEARS	744	695	736	781	797	884
08 YEARS	650	638	695	758	804	830
09 YEARS	610	608	646	692	747	821
10 YEARS	610	548	583	656	681	733
11 YEARS	526	506	541	575	653	732
12 YEARS	503	488	495	539	536	660
13 YEARS	477	436	439	491	511	550
14 YEARS	454	417	445	449	504	511
15 YEARS	398	392	401	454	434	516
16 YEARS	387	372	389	409	450	442
17 YEARS	347	349	343	348	385	453
18 YEARS	299	310	319	339	344	398
19 YEARS	299	260	302	312	328	341
20 YEARS	281	277	246	284	327	317
21 YEARS	246	274	250	247	274	314
22 YEARS	228	245	264	243	238	271
23 YEARS	216	211	219	252	239	248
24 YEARS	211	210	190	235	252	245
25 YEARS	296	219	192	180	229	235
26 YEARS	362	275	198	182	187	217
27 YEARS	444	348	244	192	173	185
28 YEARS	365	430	318	242	176	168
29 YEARS	248	338	376	286	228	168
30 YEARS	151	240	308	354	274	224
31 YEARS	133	143	212	275	319	250
32 YEARS	93	133	140	203	249	302
33 YEARS	73	95	117	121	186	230
34 YEARS	88	66	89	101	111	177
35 YEARS	64	86	65	92	84	105
36 YEARS	81	57	80	55	91	82
37 YEARS	69	62	49	71	50	80
38 YEARS	50	63	53	43	61	39
39 YEARS	39	38	42	43	45	57
40 YEARS	35	29	36	29	37	35

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 11
MATURITY DATA
MEAN ANNUAL SALARIES
YEARS FROM BACHELOR GRADUATION
1977 TO 1982

ENGINEER	1977 \$	1978 \$	1979 \$	1980 \$	1981 \$	1982 \$
+00 YEAR	14091	15316	16480	18876	21848	25069
01 YEAR	15426	16130	17898	20350	23881	27103
02 YEARS	16579	17721	19460	22136	25898	29609
03 YEARS	17982	19098	21111	23686	27873	31242
04 YEARS	19011	20450	22530	25349	29536	33509
05 YEARS	20225	21493	23930	26542	31216	35031
06 YEARS	21545	22723	25026	28151	32528	36868
07 YEARS	22579	24060	26144	29327	33935	38734
08 YEARS	23569	25146	27195	30247	35678	40283
09 YEARS	24244	25913	28077	31666	36791	41653
10 YEARS	24907	26961	29152	32257	38280	43027
11 YEARS	25613	27197	29872	33407	39148	44102
12 YEARS	26202	27999	30377	34296	39972	45605
13 YEARS	26277	28678	31428	34736	40740	46430
14 YEARS	26921	28873	31837	35883	41303	47250
15 YEARS	27857	29386	31865	36055	42440	47839
16 YEARS	28166	30321	32269	36102	41806	48748
17 YEARS	27784	30475	33301	36846	42293	48194
18 YEARS	28522	30435	32987	37981	42511	48198
19 YEARS	29356	30957	33440	37631	43679	48660
20 YEARS	29469	32042	33809	37498	43451	49541
21 YEARS	29190	32621	34723	38153	43943	49886
22 YEARS	29615	31892	35114	39105	44527	49669
23 YEARS	29213	32587	34732	39223	44306	50483
24 YEARS	29753	32097	34915	38683	44352	50204
25 YEARS	29216	31907	34995	38870	44176	49748
26 YEARS	29692	31930	35393	38735	44354	50129
27 YEARS	29902	32499	34524	38940	45241	49690
28 YEARS	30886	32249	35246	38549	44775	50666
29 YEARS	31324	33432	35147	38849	43872	50479
30 YEARS	30296	33593	35992	38932	44284	49933
31 YEARS	30838	32933	36598	39471	44260	49178
32 YEARS	30178	33438	36054	40164	45253	50475
33 YEARS	30776	32927	36010	39201	46176	50481
34 YEARS	30946	33673	35342	39605	44938	51392
35 YEARS	30856	33487	35593	38572	45478	50863
36 YEARS	30173	32475	36031	39641	42824	50560
37 YEARS	29384	32804	35107	39385	44326	49589
38 YEARS	31641	31907	35494	39652	44886	50001
39 YEARS	30198	34328	34038	38753	45341	50564
40 YEARS	29879	31910	37341	37635	43466	50754

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 12
MATURITY DATA
INTER-YEAR DIFFERENTIALS IN MEAN RATES OF PAY
YEARS FROM BACHELOR GRADUATION
ENGINEER 3 = 100%
1977 TO 1982

ENGINEER	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
+00 YEAR	63.5	64.8	63.7	66.0	67.2	68.8
01 YEAR	69.5	68.2	69.2	71.2	73.4	74.3
02 YEARS	74.7	74.9	75.2	77.4	79.6	81.2
03 YEARS	81.0	80.8	81.6	82.9	85.7	85.7
04 YEARS	85.7	86.5	87.1	88.7	90.8	91.9
05 YEARS	91.1	90.9	92.5	92.9	95.9	96.1
06 YEARS	97.1	96.1	96.7	98.5	99.9	101.1
07 YEARS	101.7	101.7	101.0	102.6	104.3	106.2
08 YEARS	106.2	106.3	105.1	105.8	109.7	110.5
09 YEARS	109.2	109.6	108.5	110.8	113.1	114.2
10 YEARS	112.2	114.0	112.7	112.9	117.7	118.0
11 YEARS	115.4	115.0	115.4	116.9	120.3	120.9
12 YEARS	118.0	118.4	117.4	120.0	122.9	125.1
13 YEARS	118.4	121.3	121.4	121.5	125.2	127.3
14 YEARS	121.3	122.1	123.0	125.6	126.9	129.6
15 YEARS	125.5	124.3	123.1	126.2	130.4	131.2
16 YEARS	126.9	128.2	124.7	126.3	128.5	133.7
17 YEARS	125.2	128.9	128.7	128.9	130.0	132.2
18 YEARS	128.5	128.7	127.5	132.9	130.7	132.2
19 YEARS	132.3	130.9	129.2	131.7	134.3	133.4
20 YEARS	132.8	135.5	130.6	131.2	133.6	135.9
21 YEARS	131.5	137.9	134.2	133.5	135.1	136.8
22 YEARS	133.4	134.9	135.7	136.8	136.9	136.2
23 YEARS	131.6	137.8	134.2	137.2	136.2	138.4
24 YEARS	134.0	135.7	134.9	135.3	136.3	137.7
25 YEARS	131.6	134.9	135.2	136.0	135.8	136.4
26 YEARS	133.8	135.0	136.8	135.5	136.3	137.5
27 YEARS	134.7	137.4	133.4	136.2	139.1	136.3
28 YEARS	139.2	136.4	136.2	134.9	137.6	138.9
29 YEARS	141.1	141.4	135.8	135.9	134.8	138.4
30 YEARS	136.5	142.1	139.1	136.2	136.1	136.9
31 YEARS	138.9	139.3	141.4	138.1	136.0	134.9
32 YEARS	136.0	141.4	139.3	140.5	139.1	138.4
33 YEARS	138.7	139.2	139.1	137.2	141.9	138.4
34 YEARS	139.4	142.4	136.6	138.6	138.1	140.9
35 YEARS	139.0	141.6	137.5	134.9	139.8	139.5
36 YEARS	135.9	137.3	139.2	138.7	131.6	138.7
37 YEARS	132.4	138.7	135.7	137.8	136.2	136.0
38 YEARS	142.6	134.9	137.1	138.7	138.0	137.1
39 YEARS	136.1	145.2	131.5	135.6	139.4	138.7
40 YEARS	134.6	134.9	144.3	131.7	133.6	139.2
MEAN RATE						
ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

+00 YEAR MEANS GRADUATES OF THE CURRENT YEAR

TABLE 13
MATURITY DATA
PERCENTAGE CHANGE IN MEAN RATES OF PAY
YEARS FROM BACHELOR GRADUATION
1977 TO 1982

ENGINEER	1977 TO 1978 %	1978 TO 1979 %	1979 TO 1980 %	1980 TO 1981 %	1981 TO 1982 %
+00 YEAR	8.7	7.6	14.5	15.7	14.7
01 YEAR	4.6	11.0	13.7	17.4	13.5
02 YEARS	6.9	9.8	13.8	17.0	14.3
03 YEARS	6.2	10.5	12.2	17.7	12.1
04 YEARS	7.6	10.2	12.5	16.5	13.4
05 YEARS	6.3	11.3	10.9	17.6	12.2
06 YEARS	5.5	10.1	12.5	15.5	13.3
07 YEARS	6.6	8.7	12.2	15.7	14.1
08 YEARS	6.7	8.1	11.2	18.0	12.9
09 YEARS	6.9	8.4	12.8	16.2	13.2
10 YEARS	8.2	8.1	10.7	18.7	12.4
11 YEARS	6.2	9.8	11.8	17.2	12.7
12 YEARS	6.9	8.5	12.9	16.6	14.1
13 YEARS	9.1	9.6	10.5	17.3	14.0
14 YEARS	7.3	10.3	12.7	15.1	14.4
15 YEARS	5.5	8.4	13.1	17.7	12.7
16 YEARS	7.7	6.4	11.9	15.8	16.6
17 YEARS	9.7	9.3	10.6	14.8	14.0
18 YEARS	6.7	8.4	15.1	11.9	13.4
19 YEARS	5.5	8.0	12.5	16.1	11.4
20 YEARS	8.7	5.5	10.9	15.9	14.0
21 YEARS	11.8	6.4	9.9	15.2	13.5
22 YEARS	7.7	10.1	11.4	13.9	11.5
23 YEARS	11.5	6.6	12.9	13.0	13.9
24 YEARS	7.9	8.8	10.8	14.7	13.2
25 YEARS	9.2	9.7	11.1	13.7	12.6
26 YEARS	7.5	10.8	9.4	14.5	13.0
27 YEARS	8.7	6.2	12.8	16.2	9.8
28 YEARS	4.4	9.3	9.4	16.2	13.2
29 YEARS	6.7	5.1	10.5	12.9	15.1
30 YEARS	10.9	7.1	8.2	13.7	12.8
31 YEARS	6.8	11.1	7.9	12.1	11.1
32 YEARS	10.8	7.8	11.4	12.7	11.5
33 YEARS	7.0	9.4	8.9	17.8	9.3
34 YEARS	8.8	4.9	12.1	13.5	14.4
35 YEARS	8.5	6.3	8.4	17.9	11.8
36 YEARS	7.6	10.9	10.0	8.0	18.1
37 YEARS	11.6	7.0	12.2	12.5	11.9
38 YEARS	0.8	11.2	11.7	13.2	11.4
39 YEARS	13.7	(0.9)	13.9	17.0	11.5
40 YEARS	6.8	17.0	0.8	15.5	16.8

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1978 TO 1982

LIBRARIAN	1978		1980		1981		1982	
	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>
LEVEL 1	584	28.6	516	26.2	481	24.9	491	26.9
LEVEL 2	750	36.7	695	35.4	706	36.5	679	37.2
LEVEL 3	447	21.9	482	24.5	473	24.4	391	21.4
LEVEL 4	168	8.2	179	9.1	190	9.8	181	9.9
LEVEL 5	61	3.0	63	3.2	53	2.7	53	2.9
LEVEL 6	32	1.6	32	1.6	32	1.7	31	1.7
TOTAL	2042	100.0	1967	100.0	1935	100.0	1826	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1978 TO 1982

LIBRARIAN	1978	1980	1981		1982	
	MEAN \$	MEAN \$	MEAN \$	%	MEAN \$	%
LEVEL 1	16768	18564	20126	8.4	23388	16.2
LEVEL 2	19681	21623	24270	12.2	27476	13.2
LEVEL 3	22721	24747	27009	9.1	31338	16.0
LEVEL 4	26406	28356	31698	11.8	35416	11.7
LEVEL 5	32289	35153	38527	9.6	42035	9.1
LEVEL 6	38571	41502	45774	10.3	51957	13.5
	Q-3 \$	Q-3 \$	Q-3 \$	%	Q-3 \$	%
LEVEL 1	18251	20049	21788	8.7	25572	17.4
LEVEL 2	21819	23699	26064	10.0	29707	14.0
LEVEL 3	25249	27294	29181	6.9	34798	19.2
LEVEL 4	28932	30876	34366	11.3	38302	11.5
LEVEL 5	35733	37650	41835	11.1	45334	8.4
LEVEL 6	43044	44351	47359	6.8	53933	13.9

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1973 TO 1982

LIBRARIAN	FIVE YEAR PERIOD PERCENTAGE INCREASE		TEN YEAR PERIOD PERCENTAGE INCREASE
	<u>1973 TO 1976(a)</u> %	<u>1978 TO 1982(a)</u> %	<u>1973 TO 1982(a)</u> %
LEVEL 1	44.3	39.5	129.7
LEVEL 2	41.5	39.6	132.0
LEVEL 3	42.4	37.9	129.8
LEVEL 4	43.4	34.1	126.0
LEVEL 5	39.3	30.2	115.0
LEVEL 6	38.4	34.7	109.6

(a) No reports for Librarian in 1972 and 1977.

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1978 TO 1982

LIBRARIAN	1978 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>				
LEVEL 1	78.2	79.9	84.5	89.3
LEVEL 2	83.9	85.8	86.6	87.5
LEVEL 3	81.9	83.3	93.0	88.9
LEVEL 4	92.0	92.6	97.4	94.0
LEVEL 5	*	*	*	91.2
LEVEL 6	-	-	-	*
<u>QUEBEC</u>				
LEVEL 1	104.4	105.4	99.5	110.6
LEVEL 2	115.0	113.3	110.5	112.2
LEVEL 3	118.2	112.2	114.2	114.5
LEVEL 4	117.4	115.2	109.7	111.7
LEVEL 5	113.0	107.1	111.3	112.7
LEVEL 6	113.3	*	*	*
<u>ONTARIO</u>				
LEVEL 1	94.9	94.8	97.3	94.6
LEVEL 2	92.4	92.7	92.2	95.2
LEVEL 3	92.2	91.8	92.8	92.6
LEVEL 4	93.8	96.1	97.1	99.1
LEVEL 5	92.7	96.4	99.0	99.1
LEVEL 6	96.1	97.6	98.0	98.6
<u>PRAIRIES</u>				
LEVEL 1	97.9	98.5	97.1	96.1
LEVEL 2	100.8	100.6	96.8	96.0
LEVEL 3	98.1	99.3	98.7	95.0
LEVEL 4	101.1	98.6	98.5	99.5
LEVEL 5	95.5	98.1	95.3	94.2
LEVEL 6	95.9	97.0	100.4	98.8
<u>BRITISH COLUMBIA</u>				
LEVEL 1	113.2	113.0	110.9	119.8
LEVEL 2	113.4	113.4	108.9	109.4
LEVEL 3	111.1	112.1	109.5	115.3
LEVEL 4	107.7	109.5	108.6	104.6
LEVEL 5	103.8	*	*	*
LEVEL 6	*	*	101.9	*

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1978 TO 1982

LIBRARIAN	1978 %	1980 %	1981 %	1982 %
LEVEL 1	70.9	65.0	61.9	64.1
LEVEL 2	83.2	75.7	74.6	75.4
LEVEL 3	96.1	86.6	83.0	85.9
LEVEL 4	111.7	99.2	97.4	97.1
LEVEL 5	136.5	123.0	118.4	115.3
LEVEL 6	163.1	145.2	140.7	142.5
MEAN RATE ENGINEER 3	\$23647	\$28580	\$32535	\$36463

TABLE 10
MATURITY DATA
NUMBER OF BACHELOR GRADUATES
BY YEAR FROM GRADUATION
1978 TO 1982

LIBRARIAN	NUMBER OF BACHELOR GRADUATES			
	1978	1980	1981	1982
+00 YEAR	*	-	-	-
01 YEAR	9	6	-	-
02 YEARS	17	7	*	*
03 YEARS	30	6	*	5
04 YEARS	35	19	5	6
05 YEARS	27	23	13	12
06 YEARS	25	25	17	17
07 YEARS	34	21	17	20
08 YEARS	79	19	19	22
09 YEARS	71	39	14	24
10 YEARS	57	59	33	27
11 YEARS	48	61	53	40
12 YEARS	55	61	49	55
13 YEARS	41	46	52	48
14 YEARS	46	52	38	44
15 YEARS	43	45	42	29
16 YEARS	34	39	35	47
17 YEARS	20	36	39	41
18 YEARS	25	31	34	31
19 YEARS	16	18	24	28
20 YEARS	12	28	14	27
21 YEARS	9	18	18	21
22 YEARS	17	13	15	19
23 YEARS	10	16	7	19
24 YEARS	19	12	14	6
25 YEARS	18	6	8	17
26 YEARS	-	25	*	9
27 YEARS	-	17	18	10
28 YEARS	-	10	14	16
29 YEARS	-	16	10	17
30 YEARS	-	18	9	7
31 YEARS	-	18	15	13
32 YEARS	-	5	13	14
33 YEARS	-	8	7	10
34 YEARS	-	*	10	8
35 YEARS	-	*	*	11
36 YEARS	-	7	*	*
37 YEARS	-	5	*	*
38 YEARS	-	*	*	*
39 YEARS	-	*	*	5
40 YEARS	-	6	*	*

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR

TABLE 11
MATURITY DATA
MEAN ANNUAL SALARIES
YEARS FROM BACHELOR GRADUATION
1978 TO 1982

LIBRARIAN	1978 \$	1980 \$	1981 \$	1982 \$
+00 YEAR	*	-	-	-
01 YEAR	15005	18378	-	-
02 YEARS	15743	19559	*	*
03 YEARS	17398	16437	*	26632
04 YEARS	17611	18113	17722	22402
05 YEARS	18362	18416	20438	23160
06 YEARS	18157	19788	21661	25026
07 YEARS	19173	20322	21975	24179
08 YEARS	20144	22014	22628	25851
09 YEARS	20400	21270	25839	26025
10 YEARS	20473	22749	23209	27848
11 YEARS	21569	22744	24934	26980
12 YEARS	22884	22851	24237	28173
13 YEARS	23284	23539	25666	28854
14 YEARS	22988	25722	25755	30168
15 YEARS	24321	25914	28678	28059
16 YEARS	23702	24611	28178	32908
17 YEARS	26674	26039	28221	29744
18 YEARS	22973	25556	28699	32904
19 YEARS	23693	27839	28638	33714
20 YEARS	22330	24657	28763	33307
21 YEARS	24867	26203	28492	35712
22 YEARS	25913	23010	28792	31979
23 YEARS	25519	26452	29054	31384
24 YEARS	26221	28174	31316	30615
25 YEARS	24071	25916	29971	34206
26 YEARS	-	28464	*	30297
27 YEARS	-	27027	32281	36361
28 YEARS	-	28133	30207	34257
29 YEARS	-	28077	31552	32545
30 YEARS	-	29176	27747	32481
31 YEARS	-	26263	32250	38249
32 YEARS	-	24858	28258	35857
33 YEARS	-	26525	28459	35270
34 YEARS	-	*	29863	36090
35 YEARS	-	*	*	36325
36 YEARS	-	26797	*	*
37 YEARS	-	24031	*	*
38 YEARS	-	*	*	*
39 YEARS	-	*	*	31496
40 YEARS	-	27322	*	*

+00 YEARS MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 12
MATURITY DATA
OCCUPATIONAL DIFFERENTIAL
ENGINEER = 100%
1978 TO 1982

LIBRARIAN	1978 %	1980 %	1981 %	1982 %
+00 YEAR	*	-	-	-
01 YEAR	93.0	90.3	-	-
02 YEARS	88.8	88.4	*	*
03 YEARS	91.1	69.4	*	85.2
04 YEARS	86.1	71.5	60.0	66.9
05 YEARS	85.4	69.4	65.5	66.1
06 YEARS	79.9	70.3	66.6	67.9
07 YEARS	79.7	69.3	64.8	62.4
08 YEARS	80.1	72.8	63.4	64.2
09 YEARS	78.7	67.2	70.2	62.5
10 YEARS	75.9	70.5	60.6	64.7
11 YEARS	79.3	68.1	63.7	61.2
12 YEARS	81.7	66.6	60.6	61.8
13 YEARS	81.2	67.8	63.0	62.1
14 YEARS	79.6	71.7	62.3	63.8
15 YEARS	82.8	71.9	67.6	58.7
16 YEARS	78.2	68.2	67.4	67.5
17 YEARS	87.5	70.7	66.7	61.7
18 YEARS	75.5	67.3	67.5	68.3
19 YEARS	76.5	73.9	67.6	69.3
20 YEARS	69.7	65.8	66.2	67.2
21 YEARS	76.2	68.7	64.8	71.6
22 YEARS	81.2	58.8	64.7	64.4
23 YEARS	78.3	67.4	65.6	62.2
24 YEARS	81.7	98.2	70.6	61.0
25 YEARS	75.4	66.7	67.8	68.8
26 YEARS	-	73.5	*	60.4
27 YEARS	-	69.4	71.3	73.2
28 YEARS	-	73.0	67.5	67.6
29 YEARS	-	72.3	71.9	64.5
30 YEARS	-	74.9	62.6	65.0
31 YEARS	-	66.5	72.9	77.8
32 YEARS	-	61.9	62.4	71.0
33 YEARS	-	67.7	61.6	69.9
34 YEARS	-	*	66.5	70.2
35 YEARS	-	*	*	71.4
36 YEARS	-	67.6	*	*
37 YEARS	-	61.0	*	*
38 YEARS	-	*	*	*
39 YEARS	-	*	*	62.3
40 YEARS	-	72.6	*	*

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 13
MATURITY DATA
PERCENTAGE CHANGE IN MEAN RATES OF PAY
YEARS FROM BACHELOR GRADUATION
1978 TO 1982

LIBRARIAN	1978 TO 1980 %	1980 TO 1981 %	1981 TO 1982 %
+00 YEAR	-	-	-
01 YEAR	22.5	-	-
02 YEARS	24.2	*	*
03 YEARS	(5.5)	*	*
04 YEARS	2.9	(2.2)	26.4
05 YEARS	0.3	11.0	13.3
06 YEARS	9.0	9.5	15.5
07 YEARS	6.0	8.1	10.0
08 YEARS	9.3	2.8	14.2
09 YEARS	4.3	21.5	0.7
10 YEARS	11.1	2.0	20.0
11 YEARS	5.4	9.6	8.2
12 YEARS	(0.1)	6.1	16.2
13 YEARS	1.1	9.0	12.4
14 YEARS	11.9	0.1	17.1
15 YEARS	6.5	10.7	(2.2)
16 YEARS	3.8	14.5	16.8
17 YEARS	(2.4)	8.4	5.4
18 YEARS	11.2	12.3	14.7
19 YEARS	17.5	2.9	17.7
20 YEARS	10.4	16.7	15.8
21 YEARS	5.4	8.7	25.3
22 YEARS	(11.2)	25.1	11.1
23 YEARS	3.7	9.8	8.0
24 YEARS	7.4	11.2	(2.2)
25 YEARS	7.7	15.6	14.1
26 YEARS	-	*	*
27 YEARS	-	19.4	12.6
28 YEARS	-	7.4	13.4
29 YEARS	-	12.4	3.1
30 YEARS	-	(4.9)	17.1
31 YEARS	-	22.8	18.6
32 YEARS	-	13.7	26.9
33 YEARS	-	7.3	23.9
34 YEARS	-	*	20.9
35 YEARS	-	*	*
36 YEARS	-	*	*
37 YEARS	-	*	*
38 YEARS	-	*	*
39 YEARS	-	*	*
40 YEARS	-	*	*

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

PHYSICAL SCIENTIST	1977		1978		1979		1980		1981		1982	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
LEVEL 1	346	20.6	293	22.0	313	23.3	396	25.1	480	24.9	438	23.4
LEVEL 2	460	27.4	359	26.9	375	28.0	407	25.8	547	28.3	594	31.7
LEVEL 3	485	28.8	356	26.7	321	23.9	370	23.5	413	21.4	397	21.2
LEVEL 4	240	14.3	204	15.3	222	16.6	256	16.2	291	15.1	257	13.7
LEVEL 5	150	8.9	12	9.1	110	8.2	149	9.4	198	10.3	187	10.0
TOTAL	1681	100.0	1334	100.0	1341	100.0	1578	100.0	1929	100.0	1873	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

PHYSICAL SCIENTIST	1977		1978		1979		1980		1981		1982	
	MEAN	\$	MEAN	%	MEAN	\$	MEAN	%	MEAN	\$	MEAN	%
LEVEL 1	16719		18970	10.6	20655		23388	13.2	27173		31612	16.3
LEVEL 2	21372		23914	9.3	25865		29525	14.2	34324		38937	13.4
LEVEL 3	27065		30077	8.3	32966		36680	11.3	41800		47352	13.3
LEVEL 4	32409		36247	10.4	39838		43185	8.4	49956		59511	19.1
LEVEL 5	37177		40783	7.8	44963		51063	13.6	60201		66924	11.2
	Q-3	\$	Q-3	%	Q-3	\$	Q-3	%	Q-3	\$	Q-3	%
LEVEL 1	17949		20202	12.0	22516		25317	12.4	29160		33780	15.8
LEVEL 2	22905		26448	11.7	28260		32004	13.2	37068		42380	14.3
LEVEL 3	29820		32909	7.4	36000		40800	13.3	45150		52212	15.6
LEVEL 4	35604		39282	10.3	43610		47475	8.9	55440		67008	20.9
LEVEL 5	40590		45072	10.2	48526		55782	15.0	66615		75000	12.6

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1974 TO 1982

PHYSICAL SCIENTIST	FIVE YEAR PERIOD PERCENTAGE INCREASE		TEN YEAR PERIOD PERCENTAGE INCREASE
	1974 TO 1977(a)	1977 TO 1982	1974 TO 1982(a)
	%	%	%
LEVEL 1	33.0	89.1	151.6
LEVEL 2	32.8	82.2	141.9
LEVEL 3	32.9	75.0	132.5
LEVEL 4	38.4	83.6	154.2
LEVEL 5	26.2	80.0	127.1

(a) No report for Physical Scientist in 1972 or 1973

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

PHYSICAL SCIENTIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
LEVEL 1	88.4	*	*	87.7	*	88.7
LEVEL 2	84.7	*	89.8	89.2	85.7	84.9
LEVEL 3	83.3	*	87.3	88.9	92.5	78.8
LEVEL 4	*	*	*	*	*	*
LEVEL 5	77.1	*	-	-	-	*
<u>QUEBEC</u>						
LEVEL 1	111.2	89.1	*	*	86.0	88.9
LEVEL 2	101.1	*	91.9	89.6	87.0	82.0
LEVEL 3	106.1	96.1	97.9	95.4	92.2	84.3
LEVEL 4	92.0	87.1	*	*	91.7	89.8
LEVEL 5	*	*	*	*	*	*
<u>ONTARIO</u>						
LEVEL 1	104.1	123.0	122.2	110.3	105.1	99.8
LEVEL 2	99.3	103.7	105.4	102.2	100.5	102.5
LEVEL 3	93.0	99.4	100.4	96.6	96.9	95.0
LEVEL 4	91.8	93.0	97.9	94.6	88.4	80.4
LEVEL 5	94.0	85.4	87.4	90.1	85.3	85.6
<u>PRAIRIES</u>						
LEVEL 1	100.0	95.3	95.5	97.9	99.4	101.2
LEVEL 2	101.5	100.4	100.1	101.0	101.1	100.5
LEVEL 3	103.8	101.9	100.9	102.8	102.6	104.7
LEVEL 4	104.2	103.5	103.0	102.8	104.5	104.5
LEVEL 5	104.9	106.1	104.4	102.5	103.0	103.2
<u>BRITISH COLUMBIA</u>						
LEVEL 1	107.3	98.5	107.3	100.4	99.8	99.1
LEVEL 2	98.8	89.8	93.5	92.5	95.6	93.5
LEVEL 3	92.1	87.6	94.6	93.8	94.4	93.9
LEVEL 4	86.1	84.5	*	89.0	86.5	74.5
LEVEL 5	86.4	83.8	87.4	89.4	84.8	84.1

Source: Pay Research Bureau

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

PHYSICAL SCIENTIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
LEVEL 1	102.6	93.8	92.7	96.9	96.2	98.5
LEVEL 2	104.2	95.3	96.0	95.4	96.5	99.3
LEVEL 3	101.0	97.5	98.0	94.7	94.8	95.3
LEVEL 4	102.0	99.4	99.7	98.1	97.5	98.9
LEVEL 5	100.5	98.2	99.7	95.7	97.6	93.2
<u>MANUFACTURING</u>						
LEVEL 1	102.3	98.3	103.4	101.9	102.4	100.1
LEVEL 2	97.2	102.5	102.6	103.5	104.8	102.3
LEVEL 3	104.5	103.5	101.0	106.3	109.3	111.8
LEVEL 4	98.9	101.8	100.8	104.9	109.4	111.3
LEVEL 5	104.5	104.9	103.9	107.4	107.7	110.0
<u>TRANSPORTATION & COMMUNICATION</u>						
LEVEL 1	107.0(a)	-	-	-	-	-
LEVEL 2	113.6(a)	-	-	-	-	-
LEVEL 3	105.2(a)	-	-	-	-	-
LEVEL 4	*	-	-	-	-	-
LEVEL 5	-	-	-	-	-	-
<u>PUBLIC UTILITIES</u>						
LEVEL 1	(a)	129.4	129.1	*	*	*
LEVEL 2	(a)	*	*	107.8	104.5	106.1
LEVEL 3	(a)	106.5	107.9	106.7	104.7	102.5
LEVEL 4	(a)	104.7	*	102.2	*	*
LEVEL 5	(a)	-	-	*	-	-
<u>SERVICE</u>						
LEVEL 1		90.8	92.9	89.8	96.8	103.3
LEVEL 2		92.4	90.7	91.8	89.7	94.5
LEVEL 3		92.1	89.1	93.2	98.5	96.8
LEVEL 4		89.2	94.7	*	*	95.3
LEVEL 5		81.3	*	*	*	92.8

(a) Transportation, Communications and Public Utilities combined.

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

PHYSICAL SCIENTIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 1	75.3	80.2	79.8	81.8	83.5	86.7
LEVEL 2	96.3	101.1	99.9	103.3	105.5	106.8
LEVEL 3	121.9	127.2	127.4	128.3	128.5	129.9
LEVEL 4	146.0	153.3	153.9	151.1	153.5	163.2
LEVEL 5	167.5	172.5	173.7	178.7	185.0	183.5
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

TABLE 10
MATURITY DATA
NUMBER OF BACHELOR GRADUATES
BY YEAR FROM GRADUATION
1977 TO 1982

PHYSICAL SCIENTIST	NUMBER OF BACHELOR GRADUATES					
	1977	1978	1979	1980	1981	1982
+00 YEAR	12	21	10	14	17	10
01 YEAR	43	45	60	79	89	44
02 YEARS	68	55	51	85	99	98
03 YEARS	67	62	60	71	106	136
04 YEARS	70	71	78	55	98	113
05 YEARS	56	59	76	76	76	104
06 YEARS	53	48	55	82	96	78
07 YEARS	45	46	54	49	114	87
08 YEARS	56	42	39	57	69	99
09 YEARS	48	40	41	49	75	65
10 YEARS	39	25	34	29	67	72
11 YEARS	39	33	34	34	40	50
12 YEARS	34	32	30	34	40	24
13 YEARS	25	26	31	33	49	33
14 YEARS	24	18	25	29	33	42
15 YEARS	20	19	21	21	34	27
16 YEARS	24	20	10	19	21	28
17 YEARS	27	14	16	13	21	26
18 YEARS	20	23	13	14	19	17
19 YEARS	26	15	19	12	14	19
20 YEARS	20	14	16	17	17	16
21 YEARS	33	22	11	17	26	9
22 YEARS	31	24	20	12	18	22
23 YEARS	22	31	20	11	12	15
24 YEARS	31	20	23	18	15	16
25 YEARS	39	26	16	22	22	15
26 YEARS	45	31	23	16	20	19
27 YEARS	43	46	28	21	19	15
28 YEARS	38	31	37	30	22	22
29 YEARS	23	34	26	30	24	20
30 YEARS	14	20	23	27	32	25
31 YEARS	-	12	14	18	29	27
32 YEARS	-	6	7	13	23	24
33 YEARS	-	7	*	*	12	24
34 YEARS	-	5	5	*	9	13
35 YEARS	-	*	*	5	8	9
36 YEARS	-	*	*	*	*	5
37 YEARS	-	*	-	*	5	*
38 YEARS	-	*	*	*	*	*
39 YEARS	-	*	*	5	-	*
40 YEARS	-	*	*	*	*	-

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 11
MATURITY DATA
MEAN ANNUAL SALARIES
YEARS FROM BACHELOR GRADUATION
1977 TO 1982

PHYSICAL SCIENTIST	1977 \$	1978 \$	1979 \$	1980 \$	1981 \$	1982 \$
+00 YEAR	14490	15506	17160	19891	22920	26448
01 YEAR	15790	17012	17674	21400	24772	30062
02 YEARS	16469	17753	19314	22850	27471	31634
03 YEARS	17870	19501	20976	25227	29689	34069
04 YEARS	19683	20467	22610	26346	31831	36222
05 YEARS	19581	21699	23447	28297	33760	38712
06 YEARS	20777	23251	25492	29851	34026	39125
07 YEARS	23076	24442	27264	31767	35205	40568
08 YEARS	23168	26629	27247	33341	38411	43510
09 YEARS	24564	26039	28921	34312	39126	45561
10 YEARS	24784	27831	30099	36330	41224	47838
11 YEARS	26948	27299	33257	38043	44370	48661
12 YEARS	27166	30115	31644	39878	42721	49463
13 YEARS	27099	30062	34354	39907	46036	51326
14 YEARS	28056	31894	35564	38705	45944	52878
15 YEARS	29750	32112	34848	41172	45234	53098
16 YEARS	31252	31775	35425	42766	47323	55678
17 YEARS	30402	32343	36585	39783	49482	53988
18 YEARS	30736	34052	35875	43447	46181	56909
19 YEARS	32979	34865	38710	39958	49344	58038
20 YEARS	32767	34369	39069	44462	46001	59151
21 YEARS	35790	35188	36216	46659	53835	53378
22 YEARS	35041	38215	40911	42372	53244	57901
23 YEARS	34870	39822	42581	45507	56736	61738
24 YEARS	33856	35791	42554	44921	56453	61324
25 YEARS	33387	36807	42791	48346	56954	63343
26 YEARS	32521	36381	40950	43255	57017	64095
27 YEARS	34045	36403	40358	47527	56898	59663
28 YEARS	35228	36529	41684	46448	54559	67660
29 YEARS	35867	38091	40755	44530	54943	63377
30 YEARS	32594	41833	44784	46284	51803	64677
31 YEARS	-	35899	43188	49590	53277	61375
32 YEARS	-	36005	38578	42630	55756	65078
33 YEARS	-	42137	*	*	48374	66506
34 YEARS	-	39398	41443	*	55567	54344
35 YEARS	-	*	*	48989	55860	64664
36 YEARS	-	*	*	*	*	65390
37 YEARS	-	*	-	*	63610	*
38 YEARS	-	*	*	*	*	*
39 YEARS	-	*	*	39801	-	*
40 YEARS	-	*	*	*	*	-

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 12
MATURITY DATA
OCCUPATIONAL DIFFERENTIAL
ENGINEER = 100%
1977 TO 1982

PHYSICAL SCIENTIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
+00 YEAR	102.8	101.2	104.1	105.3	104.9	105.5
01 YEAR	102.3	105.4	98.7	105.1	103.7	110.9
02 YEARS	99.3	100.1	99.2	103.2	106.0	106.8
03 YEARS	99.3	102.1	99.3	106.5	106.5	109.0
04 YEARS	105.3	100.0	100.3	103.9	107.7	108.0
05 YEARS	96.8	100.9	97.9	106.6	108.1	110.5
06 YEARS	96.4	102.3	101.8	106.0	104.6	106.1
07 YEARS	102.2	101.5	104.2	108.3	103.7	104.7
08 YEARS	98.2	105.8	100.1	110.2	107.6	108.0
09 YEARS	101.3	100.4	103.0	108.3	106.3	109.3
10 YEARS	99.5	103.2	103.2	112.6	107.6	111.1
11 YEARS	105.2	100.3	111.3	113.8	113.3	110.3
12 YEARS	103.6	107.5	104.1	116.2	106.8	108.4
13 YEARS	103.1	104.8	109.3	114.8	112.9	110.5
14 YEARS	104.2	110.4	111.7	107.8	111.2	111.9
15 YEARS	106.7	109.2	109.3	114.1	106.5	110.9
16 YEARS	110.9	104.7	109.7	118.4	113.1	114.2
17 YEARS	109.4	106.1	109.8	107.9	116.9	112.0
18 YEARS	107.7	111.8	108.7	114.3	108.6	118.0
19 YEARS	112.3	112.6	115.7	106.1	112.9	119.2
20 YEARS	111.1	107.2	115.5	118.5	105.8	119.3
21 YEARS	122.6	107.8	104.2	122.2	122.5	106.9
22 YEARS	118.3	119.8	116.5	108.3	119.5	116.5
23 YEARS	119.3	122.2	122.5	116.0	128.0	122.2
24 YEARS	113.7	111.5	121.8	116.1	127.2	122.1
25 YEARS	114.2	115.3	122.2	124.3	128.9	127.3
26 YEARS	109.5	113.9	115.7	111.6	128.5	127.8
27 YEARS	113.8	112.0	116.8	122.0	125.7	120.0
28 YEARS	114.0	113.2	118.2	120.4	121.8	133.5
29 YEARS	114.5	113.9	115.9	114.6	125.2	125.5
30 YEARS	107.5	124.5	124.4	118.8	116.9	129.5
31 YEARS	-	109.0	118.0	125.6	120.3	124.8
32 YEARS	-	107.6	107.0	106.1	123.2	128.9
33 YEARS	-	127.9	*	*	104.7	131.7
34 YEARS	-	-	-	*	123.6	105.7
35 YEARS	-	*	*	-	122.8	127.1
36 YEARS	-	*	*	*	*	129.3
37 YEARS	-	*	-	*	143.5	*
38 YEARS	-	*	*	-	*	*
39 YEARS	-	*	*	-	-	*
40 YEARS	-	*	*	*	*	-

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 13
MATURITY DATA
PERCENTAGE CHANGE IN MEAN RATES OF PAY
YEARS FROM BACHELOR GRADUATION
1977 TO 1982

PHYSICAL SCIENTIST	1977 TO 1978 %	1978 TO 1979 %	1979 TO 1980 %	1980 TO 1981 %	1981 TO 1982 %
+00 YEAR	7.0	10.7	15.9	15.2	15.4
01 YEAR	7.7	3.9	21.1	15.8	21.4
02 YEARS	7.8	8.8	18.3	20.2	15.2
03 YEARS	9.1	7.6	20.3	17.7	14.8
04 YEARS	4.0	10.5	16.5	20.8	13.8
05 YEARS	10.8	8.1	20.7	19.3	14.7
06 YEARS	11.9	9.6	17.1	14.0	15.0
07 YEARS	5.9	11.5	16.5	10.8	15.2
08 YEARS	14.9	2.3	22.4	15.2	13.3
09 YEARS	6.0	11.1	18.6	14.0	16.4
10 YEARS	12.3	8.1	20.7	13.5	16.0
11 YEARS	1.3	21.8	14.4	16.6	9.7
12 YEARS	10.9	5.1	26.0	7.1	15.8
13 YEARS	10.9	14.3	16.2	15.4	11.5
14 YEARS	13.7	11.5	8.8	18.7	15.1
15 YEARS	7.9	8.5	18.1	9.9	17.4
16 YEARS	1.7	11.5	20.7	10.7	17.7
17 YEARS	6.4	13.1	8.7	24.4	9.1
18 YEARS	10.8	5.4	21.1	6.3	23.2
19 YEARS	5.7	11.0	3.2	23.5	17.6
20 YEARS	4.9	13.7	13.8	3.5	28.6
21 YEARS	(1.7)	2.9	28.8	15.4	(0.8)
22 YEARS	9.1	7.1	3.6	25.7	8.7
23 YEARS	14.2	6.9	6.9	24.7	8.8
24 YEARS	5.7	18.9	5.6	25.7	8.6
25 YEARS	10.2	16.3	13.0	17.8	11.2
26 YEARS	11.9	12.6	5.6	31.8	12.4
27 YEARS	6.9	10.9	17.8	19.7	4.9
28 YEARS	3.7	14.1	11.4	17.5	24.0
29 YEARS	6.2	7.0	9.3	23.4	15.4
30 YEARS	28.3	7.1	3.3	11.9	24.9
31 YEARS	-	20.3	14.8	7.4	15.2
32 YEARS	-	7.1	10.5	30.8	16.7
33 YEARS	-	*	*	*	37.5
34 YEARS	-	5.2	*	*	(2.2)
35 YEARS	-	*	*	14.0	15.8
36 YEARS	-	*	*	*	*
37 YEARS	-	-	-	*	*
38 YEARS	-	*	*	*	*
39 YEARS	-	*	*	-	-
40 YEARS	-	*	*	*	-

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

Source: Pay Research Bureau

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
RESEARCH SCIENTIST
1977 TO 1982

RESEARCH SCIENTIST	1977 NO.OF % OF OBS. TOTAL	1978 NO.OF % OF OBS. TOTAL	1979 NO.OF % OF OBS. TOTAL	1980 NO.OF % OF OBS. TOTAL	1981 NO.OF % OF OBS. TOTAL	1982 NO.OF % OF OBS. TOTAL
RESEARCH SCIENTIST	1546 100.0	1480 100.0	1273 100.0	1442 100.0	1688 100.0	1743 100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

RESEARCH SCIENTIST	1977 MEAN \$	%	1978 MEAN \$	%	1979 MEAN \$	%	1980 MEAN \$	%	1981 MEAN \$	%	1982 MEAN \$	%
RESEARCH SCIENTIST	25418	9.8	27516	8.3	29402	6.9	32488	10.5	37425	15.2	41348	10.5
	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
RESEARCH SCIENTIST	29674	10.9	31753	7.0	33700	6.1	36660	8.8	42600	16.2	46900	10.1

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

RESEARCH SCIENTIST	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	<u>1972 TO 1977</u>	<u>1977 TO 1982</u>	<u>1972 TO 1982</u>
	%	%	%
RESEARCH SCIENTIST	59.2	62.7	159.0

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

RESEARCH SCIENTIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
RESEARCH SCIENTIST	92.2	95.8	94.3	95.3	91.9	89.2
<u>QUEBEC</u>						
RESEARCH SCIENTIST	96.9	91.2	98.8	98.8	100.0	100.8
<u>ONTARIO</u>						
RESEARCH SCIENTIST	104.3	103.0	101.9	101.4	101.5	101.1
<u>PRAIRIES</u>						
RESEARCH SCIENTIST	94.0	105.1	95.2	93.1	95.2	95.5
<u>BRITISH COLUMBIA</u>						
RESEARCH SCIENTIST	94.2	94.1	94.8	100.9	97.8	102.8

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

RESEARCH SCIENTIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
RESEARCH SCIENTIST	97.8	94.2	*	103.5	104.6	93.8
<u>MANUFACTURING</u>						
RESEARCH SCIENTIST	101.9	99.7	99.5	100.2	100.7	101.2
<u>PUBLIC UTILITIES</u>						
RESEARCH SCIENTIST	102.0	96.4	107.0	102.2	101.6	105.5
<u>TRADE</u>						
RESEARCH SCIENTIST	*	-	-	-	-	-
<u>SERVICES</u>						
RESEARCH SCIENTIST	98.3	101.8	97.9	98.8	98.4	97.1

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

RESEARCH SCIENTIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
RESEARCH SCIENTIST	114.5	116.4	113.6	113.7	115.0	113.4
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

Source: Pay Research Bureau

TABLE 10
MATURITY DATA
NUMBER OF BACHELOR GRADUATES
BY YEAR FROM GRADUATION
1977 TO 1982

RESEARCH SCIENTIST	NUMBER OF BACHELOR GRADUATES					
	1977	1978	1979	1980	1981	1982
+00 YEAR	-	*	-	-	-	-
01 YEAR	6	5	-	-	-	-
02 YEARS	8	6	-	-	*	*
03 YEARS	14	8	*	-	*	*
04 YEARS	20	8	-	-	11	8
05 YEARS	32	22	27	27	37	50
06 YEARS	27	36	22	31	53	39
07 YEARS	46	36	38	36	49	59
08 YEARS	55	41	30	47	53	42
09 YEARS	53	65	30	45	56	47
10 YEARS	70	38	51	46	52	60
11 YEARS	62	49	30	52	67	56
12 YEARS	78	51	29	48	69	54
13 YEARS	79	65	29	49	47	55
14 YEARS	62	66	39	50	49	44
15 YEARS	62	52	41	50	56	43
16 YEARS	56	59	26	41	64	45
17 YEARS	51	59	35	30	49	53
18 YEARS	30	41	34	42	36	46
19 YEARS	58	36	20	36	41	28
20 YEARS	29	48	28	30	43	36
21 YEARS	35	24	24	24	40	36
22 YEARS	31	29	16	31	33	32
23 YEARS	33	26	12	23	28	28
24 YEARS	29	26	19	15	25	26
25 YEARS	37	20	21	20	24	20
26 YEARS	34	27	13	25	30	24
27 YEARS	48	30	14	16	29	27
28 YEARS	33	32	20	22	15	22
29 YEARS	30	29	23	29	27	12
30 YEARS	17	22	21	25	33	24
31 YEARS	12	19	12	25	25	27
32 YEARS	11	11	12	15	24	20
33 YEARS	8	9	9	17	19	21
34 YEARS	12	7	8	11	11	18
35 YEARS	8	13	*	10	9	13
36 YEARS	6	6	5	8	8	9
37 YEARS	5	6	-	10	7	6
38 YEARS	5	6	*	*	8	6
39 YEARS	7	5	*	*	*	6
40 YEARS	5	5	*	*	5	*

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR

TABLE 11
MATURITY DATA
MEAN ANNUAL SALARIES
YEARS FROM BACHELOR GRADUATION
1977 TO 1982

RESEARCH SCIENTIST	1977 \$	1978 \$	1979 \$	1980 \$	1981 \$	1982 \$
+00 YEAR	-	*	-	-	-	-
01 YEAR	13804	16071	-	-	-	-
02 YEARS	14614	19799	-	-	*	*
03 YEARS	17958	20006	*	-	*	*
04 YEARS	15959	21682	-	-	28897	29025
05 YEARS	17773	19803	21135	24228	27688	32210
06 YEARS	18093	21662	22541	26111	28810	32304
07 YEARS	19965	21850	22342	24948	30984	32740
08 YEARS	20138	22400	23753	26212	30952	35983
09 YEARS	21281	22708	24224	27632	32286	35705
10 YEARS	22381	23283	25894	28595	32441	37359
11 YEARS	23144	24894	26624	28727	33944	37938
12 YEARS	23814	25812	28346	29083	34236	38962
13 YEARS	25004	27046	29288	33043	34782	38147
14 YEARS	26371	27141	30697	33635	38098	39447
15 YEARS	26811	29309	31177	32409	37424	41265
16 YEARS	26820	29642	32208	32900	37934	42846
17 YEARS	26772	29066	32434	35460	38960	41278
18 YEARS	29000	30200	33707	35532	41854	43108
19 YEARS	27825	31735	32737	35678	40876	44528
20 YEARS	28759	30060	35310	35807	40671	44637
21 YEARS	26878	30594	32552	37104	40570	45460
22 YEARS	28550	29334	33139	34481	43687	45949
23 YEARS	29861	31060	*	37452	41394	48618
24 YEARS	28212	31592	33341	36117	41702	46855
25 YEARS	28961	30998	35908	36102	43147	47642
26 YEARS	28812	30763	35969	37987	43232	46363
27 YEARS	29246	30975	31901	36797	44867	47280
28 YEARS	29827	32471	35474	36418	42023	48448
29 YEARS	28877	31570	35463	38419	42793	47930
30 YEARS	30060	31974	34654	37557	43600	48597
31 YEARS	30454	30836	30890	35936	42938	45846
32 YEARS	28221	32518	36095	36064	41281	46203
33 YEARS	27752	30968	*	36489	42171	46681
34 YEARS	30719	32262	*	36154	41607	46260
35 YEARS	27512	34561	-	37460	43057	45969
36 YEARS	33127	30245	*	35054	42808	46453
37 YEARS	31136	34358	-	35947	42073	49453
38 YEARS	31629	31958	-	*	41894	50286
39 YEARS	26229	30377	-	*	*	46290
40 YEARS	30886	31800	-	*	46830	*

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 12
MATURITY DATA
OCCUPATIONAL DIFFERENTIAL
ENGINEER = 100%
1977 TO 1982

RESEARCH SCIENTIST	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
+00 YEAR	-	*	-	-	-	-
01 YEAR	111.7	100.3	-	-	-	-
02 YEARS	113.4	89.5	-	-	*	*
03 YEARS	100.1	95.4	*	-	*	*
04 YEARS	119.1	94.3	-	-	102.2	115.4
05 YEARS	113.7	108.5	113.2	109.5	112.7	108.7
06 YEARS	119.0	104.8	111.0	107.8	112.9	114.1
07 YEARS	113.0	110.1	117.0	117.5	109.5	118.3
08 YEARS	117.0	112.2	114.4	115.3	115.2	111.9
09 YEARS	113.9	114.1	115.9	114.5	113.9	116.6
10 YEARS	111.2	115.7	112.5	112.8	117.9	115.1
11 YEARS	110.6	109.2	112.1	116.2	115.3	116.2
12 YEARS	110.0	108.4	107.1	117.9	116.7	117.0
13 YEARS	105.0	106.0	107.3	105.1	117.1	121.7
14 YEARS	102.0	106.3	103.7	106.6	108.4	119.7
15 YEARS	103.9	100.2	102.2	112.2	113.4	115.9
16 YEARS	105.0	102.2	100.1	109.7	110.2	113.7
17 YEARS	103.7	104.8	102.6	103.9	108.5	115.7
18 YEARS	98.3	100.7	97.8	106.8	101.5	111.8
19 YEARS	105.5	97.5	102.1	105.4	106.8	109.2
20 YEARS	102.4	99.9	95.7	104.7	106.8	110.9
21 YEARS	108.6	106.6	106.6	102.8	108.3	109.7
22 YEARS	103.7	108.7	105.9	113.4	101.9	108.0
23 YEARS	97.8	104.9	*	104.7	107.0	103.8
24 YEARS	105.4	101.5	104.7	107.1	106.3	107.1
25 YEARS	100.8	102.9	97.4	107.6	102.3	104.3
26 YEARS	103.0	103.7	98.3	101.9	102.5	108.1
27 YEARS	102.2	104.9	108.2	105.8	100.8	105.0
28 YEARS	103.5	99.3	99.3	105.8	106.5	104.5
29 YEARS	108.4	105.8	99.1	101.1	102.5	105.3
30 YEARS	100.7	105.0	103.8	103.6	101.5	102.7
31 YEARS	101.2	106.8	118.4	109.8	103.0	107.2
32 YEARS	106.9	102.8	99.8	111.3	109.6	109.2
33 YEARS	110.8	106.3	*	107.4	109.4	108.1
34 YEARS	100.7	104.3	*	109.5	108.0	111.0
35 YEARS	112.1	96.8	-	102.9	105.6	110.6
36 YEARS	91.0	107.3	*	113.0	100.0	108.8
37 YEARS	94.3	95.4	-	109.5	105.3	100.2
38 YEARS	100.0	99.8	-	*	107.1	99.4
39 YEARS	115.1	113.0	-	*	*	109.2
40 YEARS	96.7	100.3	-	*	92.8	*

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 13
MATURITY DATA
PERCENTAGE CHANGE IN MEAN RATES OF PAY
YEARS FROM BACHELOR GRADUATION
1977 TO 1982

RESEARCH SCIENTIST	1977 TO 1978 %	1978 TO 1979 %	1979 TO 1980 %	1980 TO 1981 %	1981 TO 1982 %
+00 YEAR	-	-	-	-	-
01 YEAR	16.4	-	-	-	-
02 YEARS	35.8	-	-	-	*
03 YEARS	11.4	*	-	-	*
04 YEARS	35.9	-	-	-	0.4
05 YEARS	11.4	6.7	14.6	14.3	16.3
06 YEARS	19.7	4.1	15.8	10.3	12.1
07 YEARS	9.4	2.3	11.7	24.2	5.7
08 YEARS	11.2	6.0	10.4	18.1	16.3
09 YEARS	6.7	6.7	14.1	16.8	10.6
10 YEARS	4.0	11.2	10.4	13.4	15.2
11 YEARS	7.6	6.9	7.9	18.2	11.8
12 YEARS	8.4	9.8	2.6	17.7	13.8
13 YEARS	8.2	8.3	12.8	5.3	9.7
14 YEARS	2.9	13.1	9.6	13.3	3.5
15 YEARS	9.3	6.4	4.0	15.5	10.3
16 YEARS	10.5	8.7	2.2	15.3	13.0
17 YEARS	8.6	11.6	9.3	9.9	6.0
18 YEARS	4.1	11.6	5.4	17.8	3.0
19 YEARS	14.1	3.2	9.0	14.6	8.9
20 YEARS	4.5	17.5	1.4	13.6	9.8
21 YEARS	13.8	6.4	14.0	9.3	12.1
22 YEARS	2.7	13.0	4.1	26.7	5.2
23 YEARS	4.0	*	*	10.5	15.9
24 YEARS	12.0	5.5	8.3	15.5	12.4
25 YEARS	7.0	15.8	0.5	19.5	10.4
26 YEARS	6.8	16.9	5.6	13.8	7.2
27 YEARS	5.9	3.0	15.3	21.9	5.4
28 YEARS	8.9	9.2	2.7	15.4	15.3
29 YEARS	9.3	12.3	8.3	11.4	12.0
30 YEARS	6.4	8.4	8.4	16.1	11.5
31 YEARS	1.3	0.2	16.3	19.5	6.8
32 YEARS	15.2	11.0	10.0	14.5	11.9
33 YEARS	11.6	*	*	15.6	10.7
34 YEARS	5.0	*	*	15.1	11.2
35 YEARS	25.6	-	-	14.9	6.8
36 YEARS	(9.5)	*	*	22.1	8.5
37 YEARS	10.3	-	-	17.0	17.5
38 YEARS	1.0	-	-	*	20.0
39 YEARS	15.8	-	-	*	*
40 YEARS	3.0	-	-	*	*

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR

Source: Pay Research Bureau

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1981

UNIVERSITY TEACHER	1977/78		1978/79		1979/80		1980/81		1981/82	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
PROFESSOR	4367	33.7	4489	34.7	4993	35.3	4316	37.1	3827	35.9
ASSOCIATE PROFESSOR	5198	40.2	5266	40.6	5853	41.3	4814	41.3	4491	42.1
ASSISTANT PROFESSOR	3380	26.1	3202	24.7	3315	23.4	2521	21.6	2346	22.0
TOTAL	12945	100.0	12957	100.0	14161	100.0	11651	100.0	10664	100.0

TABLE 5
MEAN & THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1981

UNIVERSITY TEACHER	1977/78		1978/79		1979/80		1980/81		1981/82	
	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%
PROFESSOR	36714	6.6	39127	6.6	41165	5.2	44245	7.5	48091	8.7
ASSOCIATE PROFESSOR	27896	8.9	29784	6.8	31519	5.8	33895	7.5	38123	12.5
ASSISTANT PROFESSOR	21987	8.9	23419	6.5	24848	6.1	26439	6.4	29797	12.7
	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
PROFESSOR	40200	7.0	42824	6.5	44850	4.7	48284	7.7	52515	8.8
ASSOCIATE PROFESSOR	30050	9.2	32061	6.7	34082	6.3	36679	7.6	41626	13.5
ASSISTANT PROFESSOR	23791	10.1	25534	7.3	27225	6.6	28761	5.6	32553	13.2

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1981

UNIVERSITY TEACHER	FIVE YEAR PERIOD		TEN YEAR PERIOD	
	PERCENTAGE INCREASE		PERCENTAGE INCREASE	
	<u>1972 TO 1977</u>	<u>1977 TO 1981(a)</u>	<u>1972 TO 1981(a)</u>	
	%	%	%	
PROFESSOR	41.1	31.0	97.1	
ASSOCIATE PROFESSOR	44.2	36.7	115.2	
ASSISTANT PROFESSOR	43.7	35.5	112.2	

(a) 1982 data for University Teacher are not comparable to previous years because of a significant change in selection criteria used by the Bureau to extract these data from the Statistics Canada information.

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1981

UNIVERSITY TEACHER	1977/78	1978/79	1979/80	1980/81	1981/82
	%	%	%	%	%
PROFESSOR	165.4	165.5	159.1	154.8	147.8
ASSOCIATE PROFESSOR	125.7	126.0	121.8	118.6	117.2
ASSISTANT PROFESSOR	99.1	99.0	96.0	92.5	91.6
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535

Source: Pay Research Bureau

TABLE 10
MATURITY DATA
NUMBER OF BACHELOR GRADUATES
BY YEAR FROM GRADUATION
1977 TO 1981

UNIVERSITY TEACHER	1977/78	1978/79	1979/80	1980/81	1981/82
+00 YEAR	*	5	*	-	8
01 YEAR	17	14	7	34	35
02 YEARS	34	26	19	17	26
03 YEARS	52	54	41	19	37
04 YEARS	89	83	78	43	62
05 YEARS	144	123	128	69	90
06 YEARS	220	207	173	107	122
07 YEARS	282	283	277	164	189
08 YEARS	438	326	327	153	165
09 YEARS	442	477	380	231	248
10 YEARS	513	441	545	298	278
11 YEARS	615	517	493	290	297
12 YEARS	655	621	583	406	378
13 YEARS	723	652	698	386	372
14 YEARS	688	703	729	465	448
15 YEARS	654	716	770	541	507
16 YEARS	638	638	755	622	587
17 YEARS	614	637	707	697	630
18 YEARS	665	598	703	629	564
19 YEARS	559	653	658	574	542
20 YEARS	492	537	681	570	509
21 YEARS	470	474	599	541	491
22 YEARS	407	468	506	550	506
23 YEARS	388	411	482	459	420
24 YEARS	410	390	441	405	377
25 YEARS	349	395	401	375	351
26 YEARS	386	357	416	346	284
27 YEARS	404	385	381	313	276
28 YEARS	415	375	384	336	286
29 YEARS	344	405	385	309	256
30 YEARS	231	330	399	321	272
31 YEARS	178	217	340	344	277
32 YEARS	140	173	233	336	265
33 YEARS	134	134	183	249	201
34 YEARS	139	129	136	168	125
35 YEARS	132	130	124	140	113
36 YEARS	116	133	133	102	83
37 YEARS	94	116	130	83	63
38 YEARS	94	91	104	104	76
39 YEARS	74	93	87	91	73
40 YEARS	67	66	92	75	53

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 11
MATURITY DATA
MEAN ANNUAL SALARIES
YEARS FROM BACHELOR GRADUATION
1977 TO 1981

UNIVERSITY TEACHER	1977 \$	1978 \$	1979 \$	1980 \$	1981 \$
+00 YEAR	*	23825	*	-	26473
01 YEAR	17813	19926	22849	30333	31237
02 YEARS	18336	19069	20165	22483	26421
03 YEARS	18428	19508	20707	25378	27382
04 YEARS	18692	19733	21696	23062	25715
05 YEARS	19113	20217	21209	21702	24704
06 YEARS	19291	20595	22085	23998	27365
07 YEARS	20245	20905	22753	23110	26384
08 YEARS	21065	22252	22892	24723	27886
09 YEARS	21950	22935	24624	24585	28523
10 YEARS	22604	24024	25062	25802	29745
11 YEARS	23758	24598	26151	26820	30806
12 YEARS	24182	26171	26997	27146	31533
13 YEARS	25241	26181	28396	29172	33260
14 YEARS	26151	27516	28780	30109	34068
15 YEARS	27329	28329	30159	30956	35463
16 YEARS	27664	29841	30757	32043	36311
17 YEARS	28841	30374	32024	33468	37950
18 YEARS	29587	31139	32680	34089	39004
19 YEARS	30309	32189	33577	35360	39858
20 YEARS	30970	32784	34671	35920	40886
21 YEARS	31059	33392	35097	36653	41336
22 YEARS	32068	33513	36100	37859	42621
23 YEARS	33187	34378	36098	38525	43330
24 YEARS	33190	35716	37187	39623	44431
25 YEARS	34295	35789	38204	39707	44165
26 YEARS	34147	36356	38233	40538	45247
27 YEARS	34603	36756	38830	41779	46090
28 YEARS	35692	37361	39716	41747	45750
29 YEARS	35564	38254	39146	42468	45969
30 YEARS	36602	38295	40466	42497	46526
31 YEARS	36569	38822	40432	43082	46781
32 YEARS	37043	39134	41627	44191	48069
33 YEARS	36902	39170	41309	43472	47530
34 YEARS	36380	39522	41501	44455	47436
35 YEARS	36034	38555	41742	43237	46293
36 YEARS	38177	39955	41105	44237	47991
37 YEARS	38610	41037	41720	44319	48122
38 YEARS	36502	41343	42743	43811	48173
39 YEARS	38134	40069	43738	43805	48154
40 YEARS	37724	40921	43251	45725	48010

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 12
MATURITY DATA
OCCUPATIONAL DIFFERENTIAL
ENGINEER = 100%
1977 TO 1981

UNIVERSITY TEACHER	1977 %	1978 %	1979 %	1980 %	1981 %
+00 YEAR	*	155.5	*	-	121.1
01 YEAR	115.4	123.5	127.6	149.0	130.8
02 YEARS	110.5	107.6	103.6	101.5	102.0
03 YEARS	102.4	102.1	98.0	107.1	98.2
04 YEARS	98.3	96.4	96.2	90.9	87.0
05 YEARS	94.5	94.0	88.6	81.7	79.1
06 YEARS	89.5	90.6	88.2	85.2	84.1
07 YEARS	89.6	86.8	87.0	78.8	77.7
08 YEARS	89.3	88.4	84.1	81.7	78.1
09 YEARS	90.5	88.5	87.7	77.6	77.5
10 YEARS	90.7	89.1	85.9	79.9	77.7
11 YEARS	92.7	90.4	87.5	80.2	78.6
12 YEARS	92.2	93.4	88.8	79.1	78.8
13 YEARS	96.0	91.2	90.3	83.9	81.6
14 YEARS	97.1	95.3	90.3	83.9	82.4
15 YEARS	98.1	96.4	94.6	85.8	83.5
16 YEARS	98.2	98.4	95.3	88.7	86.8
17 YEARS	103.8	99.6	96.1	90.8	89.7
18 YEARS	103.7	102.3	99.0	89.7	91.7
19 YEARS	103.2	103.9	100.4	93.9	91.2
20 YEARS	105.0	102.3	102.5	95.7	94.0
21 YEARS	106.4	102.3	101.0	96.0	94.0
22 YEARS	108.2	105.0	102.8	96.8	95.7
23 YEARS	113.6	105.4	103.9	98.2	97.7
24 YEARS	111.5	111.2	106.5	102.4	100.1
25 YEARS	117.2	112.1	109.1	102.1	99.9
26 YEARS	115.0	113.8	108.0	104.6	102.0
27 YEARS	115.7	113.0	112.4	107.2	101.8
28 YEARS	115.5	115.8	112.6	108.2	102.1
29 YEARS	113.5	114.4	111.3	109.3	104.7
30 YEARS	120.8	113.9	112.4	109.1	105.0
31 YEARS	118.5	117.8	110.4	109.1	105.6
32 YEARS	122.7	117.0	115.4	110.0	106.2
33 YEARS	119.9	118.9	114.7	110.8	102.9
34 YEARS	117.5	117.3	117.4	112.2	105.5
35 YEARS	116.7	115.1	117.2	112.0	101.7
36 YEARS	126.5	123.0	114.0	111.5	112.0
37 YEARS	131.3	125.0	118.8	112.5	108.5
38 YEARS	115.3	129.5	120.4	110.4	107.3
39 YEARS	126.2	116.7	128.4	113.0	106.2
40 YEARS	126.2	128.2	115.8	121.4	110.4

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR.

TABLE 13
MATURITY DATA
PERCENTAGE CHANGE IN MEAN RATE OF PAY
YEARS FROM BACHELOR GRADUATION
1977 TO 1981

UNIVERSITY TEACHER	1977 TO 1978 %	1978 TO 1979 %	1979 TO 1980 %	1980 TO 1981 %
+00 YEAR	*	*	-	-
01 YEAR	11.9	14.7	32.8	3.0
02 YEARS	4.0	5.8	11.5	17.5
03 YEARS	5.9	6.2	22.6	7.9
04 YEARS	5.6	10.0	6.3	11.5
05 YEARS	5.8	4.9	2.3	13.8
06 YEARS	6.8	7.2	8.7	14.0
07 YEARS	3.3	8.8	1.6	14.2
08 YEARS	5.6	2.9	8.0	12.8
09 YEARS	4.5	7.4	(0.2)	16.0
10 YEARS	6.3	4.3	3.0	15.3
11 YEARS	3.5	6.3	2.6	14.9
12 YEARS	8.2	3.2	0.6	16.2
13 YEARS	3.7	8.5	2.7	14.0
14 YEARS	5.2	4.6	4.6	13.2
15 YEARS	3.7	6.5	2.6	14.6
16 YEARS	7.9	3.1	4.2	13.3
17 YEARS	5.3	5.4	4.5	13.4
18 YEARS	5.2	5.0	4.3	14.4
19 YEARS	6.2	4.3	5.3	12.7
20 YEARS	5.9	5.8	3.6	13.8
21 YEARS	7.5	5.1	4.4	12.8
22 YEARS	4.5	7.7	4.9	12.6
23 YEARS	3.6	5.0	6.7	12.5
24 YEARS	7.6	4.1	6.6	12.1
25 YEARS	4.4	6.8	3.9	11.2
26 YEARS	6.5	5.2	6.0	11.6
27 YEARS	6.2	5.6	7.6	10.3
28 YEARS	4.7	6.3	5.1	9.6
29 YEARS	7.6	2.3	8.5	8.2
30 YEARS	4.6	5.7	5.0	8.9
31 YEARS	6.2	4.2	6.6	8.6
32 YEARS	5.7	6.4	6.2	8.8
33 YEARS	6.2	5.5	5.2	9.3
34 YEARS	8.6	5.0	7.1	6.7
35 YEARS	7.0	8.3	3.6	7.1
36 YEARS	4.7	2.9	7.6	8.5
37 YEARS	6.3	1.7	6.2	8.6
38 YEARS	13.3	3.4	2.5	10.0
39 YEARS	5.1	9.2	0.2	10.0
40 YEARS	8.5	5.7	5.7	5.0

+00 YEAR MEANS GRADUATES OF THE CURRENT CALENDAR YEAR

Source: Pay Research Bureau

SECTION 2

ADMINISTRATIVE CLASSES

Administrative Classes:

In analysing the data presented in this section, users should be aware of the following factors:

- i) In 1979, the January 1st surveys for Information Officer and Purchasing Agent were replaced by the Bureau's Automated Pay Survey Program in which the effective date is August 15th.
- ii) There were no reports published in 1978 for the Information Officer and the Purchasing Agent classes or in 1977 for the Personnel Administrator class.
- iii) No trend data for Personnel Administrator have been provided for 1982 because a full normal survey report was not published.

Trends in Survey Coverage - Canada

<u>CLASS</u>	Percentage Increases (Decreases)	
	No. of	No. of
	Orgs. <u>%</u>	Empls. <u>%</u>
COMPUTER SYSTEMS ADMINISTRATOR (1977 - 1982)	6.4	68.1
FINANCIAL ADMINISTRATOR (1977 - 1982)	1.2	41.1
INFORMATION OFFICER (1977 - 1982)	(11.4)	(51.5)
PERSONNEL ADMINISTRATOR (1978 - 1981)	(6.9)	(7.0)
PURCHASING AGENT (1977 - 1982)	12.1	41.2

TABLE 1
SURVEY COVERAGE BY CLASS - CANADA
1977 TO 1982

ADMINISTRATIVE CLASSES	1977 NO.OF NO.OF ORGS. EMPL.	1978 NO.OF NO.OF ORGS. EMPL.	1979 NO.OF NO.OF ORGS. EMPL.	1980 NO.OF NO.OF ORGS. EMPL.	1981 NO.OF NO.OF ORGS. EMPL.	1982 NO.OF NO.OF ORGS. EMPL.
COMPUTER SYSTEMS ADMINISTRATOR	157 6237	161 7068	158 7361	164 8440	156 8653	167 10482
FINANCIAL ADMINISTRATOR	164 4396	166 4910	162 4789	164 5275	161 6514	166 6203
INFORMATION OFFICER	88 1889	- -	82 967	76 807	82 967	78 917
PERSONNEL ADMINISTRATOR	- -	58 3802	58 3952	58 3900	54 3537	- -
PURCHASING AGENT	99 992	- -	105 1171	101 1162	109 1245	111 1401

TABLE 2
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR REGIONS
1977 TO 1982

ADMINISTRATIVE CLASSES	ATLANTIC PROVINCES						QUEBEC					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
COMPUTER SYSTEMS ADMINISTRATOR	2.9	2.7	3.1	3.2	3.2	2.7	32.7	29.9	27.7	24.7	26.5	22.3
FINANCIAL ADMINISTRATOR	5.0	4.6	4.5	4.9	4.5	3.6	29.7	25.4	25.0	23.0	23.9	23.3
INFORMATION OFFICER	5.2	-	5.2	5.6	5.6	3.9	40.4	-	52.7	33.1	40.8	36.3
PERSONNEL ADMINISTRATOR	-	3.9	4.4	4.8	4.7	-	-	29.8	26.8	25.5	30.3	-
PURCHASING AGENT	3.2	-	3.2	4.1	2.9	2.0	34.7	-	31.4	28.5	30.2	27.1
	ONTARIO						PRAIRIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
COMPUTER SYSTEMS ADMINISTRATOR	44.8	45.4	45.1	47.8	45.9	48.1	12.5	13.6	13.8	14.6	15.9	16.8
FINANCIAL ADMINISTRATOR	38.1	40.8	42.1	41.6	39.0	42.3	20.0	20.2	18.9	21.6	23.6	22.1
INFORMATION OFFICER	29.4	-	28.2	41.6	36.7	38.4	8.5	-	7.1	10.8	9.7	12.9
PERSONNEL ADMINISTRATOR	-	42.0	40.9	40.3	32.1	-	-	15.6	15.7	17.2	19.2	-
PURCHASING AGENT	37.2	-	44.6	44.2	41.9	43.8	14.4	-	10.6	13.2	14.3	15.3
	BRITISH COLUMBIA											
	1977	1978	1979	1980	1981	1982						
	%	%	%	%	%	%						
COMPUTER SYSTEMS ADMINISTRATOR	7.1	8.4	10.3	9.7	8.5	10.1						
FINANCIAL ADMINISTRATOR	7.2	9.0	9.5	8.9	9.0	8.7						
INFORMATION OFFICER	16.5	-	6.8	8.9	7.2	8.5						
PERSONNEL ADMINISTRATOR	-	8.7	12.2	12.2	13.7	-						
PURCHASING AGENT	10.5	-	10.2	10.0	10.7	11.8						

TABLE 3
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR INDUSTRIES
1977 TO 1982

ADMINISTRATIVE CLASSES	MINING						MANUFACTURING					
	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
COMPUTER SYSTEMS ADMINISTRATOR	6.4	5.4	5.4	6.2	6.5	6.8	29.1	27.8	28.2	28.0	27.2	23.4
FINANCIAL ADMINISTRATOR	10.4	11.3	12.4	13.0	15.2	14.4	52.0	48.2	45.2	44.0	43.1	42.4
INFORMATION OFFICER	0.7	-	3.1	2.1	2.2	2.2	37.3	-	34.0	18.0	29.3	28.7
PERSONNEL ADMINISTRATOR	-	(a)	(a)	(a)	(a)	-	-	26.5	22.9	23.3	26.3	-
PURCHASING AGENT	2.4	-	4.0	7.8	7.0	7.5	39.5	-	48.4	47.5	47.2	46.5
	TRANSPORTATION AND COMMUNICATION						PUBLIC UTILITIES					
	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
COMPUTER SYSTEMS ADMINISTRATOR	18.3	18.7	22.4	20.3	18.4	18.7	7.4	8.6	8.6	8.2	10.4	9.9
FINANCIAL ADMINISTRATOR	10.1	9.2	9.2	11.0	10.2	9.2	6.6	10.2	11.2	11.3	12.2	13.0
INFORMATION OFFICER	43.8	-	21.9	35.1	27.5	28.6	4.0	-	13.5	18.1	15.2	15.9
PERSONNEL ADMINISTRATOR(b)	-	32.3	33.3	32.7	33.2	-	-	(b)	(b)	(b)	(b)	(b)
PURCHASING AGENT	21.8	-	13.5	15.0	15.2	14.3	15.8	-	19.1	16.5	17.9	17.1
	TRADE						FINANCE & INSURANCE					
	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
COMPUTER SYSTEMS ADMINISTRATOR	5.1	2.7	2.0	2.4	2.2	2.1	21.8	19.6	17.2	15.8	19.5	19.4
FINANCIAL ADMINISTRATOR	1.8	3.7	3.7	3.4	3.0	2.1	9.4	9.3	8.9	7.8	6.8	7.6
INFORMATION OFFICER	0.5	-	1.2	0.1	1.5	1.0	3.2	-	6.0	5.6	5.7	5.6
PERSONNEL ADMINISTRATOR(c)	-	(c)	(c)	(c)	(c)	-	-	15.0	15.1	14.0	16.0	-
PURCHASING AGENT	0.8	-	2.2	1.4	2.2	2.6	2.7	-	1.8	1.6	1.7	1.7
	SERVICE											
	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %						
COMPUTER SYSTEMS ADMINISTRATOR	11.9	17.2	16.2	19.1	15.8	19.7						
FINANCIAL ADMINISTRATOR	9.7	8.1	9.4	9.5	9.5	11.3						
INFORMATION OFFICER	10.5	-	20.3	21.0	18.6	18.0						
PERSONNEL ADMINISTRATOR(c)	-	26.2	28.7	30.0	24.5	-						
PURCHASING AGENT	17.0	-	11.0	10.2	8.8	10.7						

(a) Mining and Manufacturing combined

(b) Transportation, Communication and Public Utilities combined

(c) Finance, Insurance and Trade combined

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

COMPUTER SYSTEMS ADMINISTRATOR	1977		1978		1979		1980		1981		1982	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
LEVEL 1A	304	4.9	255	3.6	266	3.6	258	3.0	337	3.9	359	3.4
LEVEL 1B	880	14.1	927	13.1	945	12.8	1131	13.4	1109	12.8	1318	12.6
LEVEL 1C	1635	26.2	1724	24.4	1780	24.2	2018	23.9	2010	23.2	2531	24.1
LEVEL 2	1619	26.0	2132	30.2	2268	30.8	2661	31.5	2616	30.2	3129	29.9
LEVEL 3	1314	21.1	1440	20.4	1503	20.4	1693	20.1	1839	21.3	2302	22.0
LEVEL 4	395	6.3	485	6.8	478	6.5	555	6.6	577	6.7	682	6.5
LEVEL 5	90	1.4	105	1.5	121	1.7	124	1.5	165	1.9	161	1.5
TOTAL	6237	100.0	7068	100.0	7361	100.0	8440	100.0	8653	100.0	10482	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

COMPUTER SYSTEMS ADMINISTRATOR	1977	1978		1979		1980		1981		1982	
	MEAN	MEAN		MEAN		MEAN		MEAN		MEAN	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL 1	15434	16466	6.7	18015	9.4	20172	12.0	22445	11.3	25617	14.1
LEVEL 2	19840	21420	8.0	23333	8.9	25938	11.2	28835	11.2	32381	12.3
LEVEL 3	23521	25751	9.5	27955	8.6	30889	10.5	34453	11.5	39194	13.8
LEVEL 4	28511	30466	6.9	32964	8.2	37081	12.5	41580	12.1	46693	12.3
LEVEL 5	35447	37477	5.7	40942	9.2	44802	9.4	50782	13.3	57169	12.6
	Q-3	Q-3		Q-3		Q-3		Q-3		Q-3	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL 1	17100	18362	7.4	20100	9.5	22440	11.6	25140	12.0	28585	13.7
LEVEL 2	21696	23316	7.5	25436	9.1	28260	11.1	31148	10.2	35100	12.7
LEVEL 3	25859	27812	7.6	30271	8.8	33276	9.9	37093	11.5	42411	14.3
LEVEL 4	31018	33584	8.3	36442	8.5	40417	10.9	44736	10.7	50019	11.8
LEVEL 5	38760	40991	5.8	45503	11.0	50217	10.4	55500	10.5	62448	12.5

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

COMPUTER SYSTEMS ADMINISTRATOR	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	<u>1972 TO 1977</u>	<u>1977 TO 1982</u>	<u>1972 TO 1982</u>
	%	%	%
LEVEL 1	55.8	66.0	158.7
LEVEL 2	62.8	63.2	165.7
LEVEL 3	63.4	66.6	172.3
LEVEL 4	63.3	63.8	167.5
LEVEL 5	61.2	61.3	160.0

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

COMPUTER SYSTEMS ADMINISTRATOR	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
LEVEL 1	92.0	85.0	84.4	81.2	82.5	83.9
LEVEL 2	90.6	91.9	91.5	86.4	87.2	87.5
LEVEL 3	94.4	93.7	93.2	87.8	91.2	87.2
LEVEL 4	91.1	92.9	93.6	88.5	89.1	88.8
LEVEL 5	*	84.7	85.9	88.5	88.8	89.4
<u>QUEBEC</u>						
LEVEL 1	98.9	98.6	100.3	100.8	100.1	98.0
LEVEL 2	99.4	97.8	99.8	99.8	99.3	98.2
LEVEL 3	96.9	97.1	99.1	99.2	100.2	99.0
LEVEL 4	96.3	98.5	99.6	100.4	99.4	97.5
LEVEL 5	92.7	102.3	100.7	102.5	103.9	101.4
<u>ONTARIO</u>						
LEVEL 1	101.8	101.9	100.9	101.1	100.6	101.0
LEVEL 2	101.2	101.6	101.3	100.5	100.3	100.1
LEVEL 3	102.7	101.7	101.7	99.6	98.7	99.0
LEVEL 4	100.5	100.5	100.3	99.3	98.9	98.4
LEVEL 5	102.5	103.1	102.2	99.3	99.2	98.7
<u>PRAIRIES</u>						
LEVEL 1	94.1	96.1	96.9	97.3	99.1	102.3
LEVEL 2	96.0	97.1	98.2	99.7	102.7	103.6
LEVEL 3	98.9	99.5	99.9	102.6	105.8	106.4
LEVEL 4	105.5	103.0	102.3	104.2	109.5	114.5
LEVEL 5	101.2	95.4	99.5	115.2	107.8	111.0
<u>BRITISH COLUMBIA</u>						
LEVEL 1	109.9	111.9	106.1	104.8	106.1	101.4
LEVEL 2	103.8	104.6	99.5	102.1	100.8	100.5
LEVEL 3	100.8	101.6	96.6	103.0	97.5	96.1
LEVEL 4	104.3	100.9	98.8	101.1	99.6	102.2
LEVEL 5	105.1	90.5	92.3	94.7	92.9	97.2

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

COMPUTER SYSTEMS ADMINISTRATOR	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
LEVEL 1	106.7	104.6	107.7	105.9	109.7	110.7
LEVEL 2	98.7	96.5	98.2	99.6	106.7	106.6
LEVEL 3	101.4	100.2	102.5	102.2	112.2	114.2
LEVEL 4	107.4	103.3	102.1	108.1	117.6	119.7
LEVEL 5	*	*	99.6	110.1	103.0	104.3
<u>MANUFACTURING</u>						
LEVEL 1	101.9	101.8	100.7	100.5	102.0	100.1
LEVEL 2	99.4	98.9	99.1	99.5	101.9	100.3
LEVEL 3	98.7	100.8	102.6	101.9	103.5	102.8
LEVEL 4	99.1	100.2	98.3	98.9	101.1	99.7
LEVEL 5	100.4	104.4	101.5	103.9	108.2	107.8
<u>TRANSPORTATION & COMMUNICATION</u>						
LEVEL 1	100.9	99.8	99.0	101.4	105.1	102.4
LEVEL 2	101.3	99.7	100.9	101.9	100.7	101.8
LEVEL 3	101.2	97.7	98.6	101.1	99.4	97.3
LEVEL 4	104.5	98.5	99.1	100.4	98.5	98.3
LEVEL 5	106.6	103.7	104.3	105.2	102.6	104.4
<u>PUBLIC UTILITIES</u>						
LEVEL 1	101.5	105.8	106.2	106.5	97.6	100.8
LEVEL 2	101.5	106.7	104.2	107.2	101.4	106.1
LEVEL 3	106.5	110.8	106.6	107.4	101.9	104.6
LEVEL 4	105.9	113.6	114.8	111.5	109.9	112.6
LEVEL 5	*	*	*	*	112.3	107.7
<u>TRADE</u>						
LEVEL 1	105.4	84.3	81.4	87.6	90.1	90.7
LEVEL 2	114.7	95.5	95.9	94.7	97.9	95.8
LEVEL 3	111.9	89.9	91.3	85.9	86.4	83.7
LEVEL 4	97.5	93.1	91.8	85.7	88.0	90.0
LEVEL 5	*	*	*	*	*	*

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

COMPUTER SYSTEMS ADMINISTRATOR	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>FINANCE & INSURANCE</u>						
LEVEL 1	96.4	95.9	98.7	95.4	93.9	97.0
LEVEL 2	98.7	97.3	100.1	99.3	98.6	99.0
LEVEL 3	99.7	97.5	98.1	98.4	94.6	97.0
LEVEL 4	93.8	96.8	101.0	95.2	93.6	94.0
LEVEL 5	94.0	97.2	98.7	89.9	86.0	85.4
<u>SERVICE</u>						
LEVEL 1	93.8	101.6	99.0	98.1	96.1	97.0
LEVEL 2	94.1	101.7	98.8	96.9	94.3	94.9
LEVEL 3	94.7	99.8	96.5	96.7	96.9	95.0
LEVEL 4	97.8	99.5	97.1	98.6	98.7	97.3
LEVEL 5	92.0	84.3	85.5	90.0	92.6	88.7

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

COMPUTER SYSTEMS ADMINISTRATOR	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 1	69.5	69.6	69.6	70.6	69.0	70.3
LEVEL 2	89.4	90.6	90.2	90.8	88.6	88.8
LEVEL 3	106.0	108.9	108.0	108.1	105.9	107.5
LEVEL 4	128.5	128.8	127.4	129.7	127.8	128.1
LEVEL 5	159.7	158.5	158.2	156.8	156.1	156.8
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

FINANCIAL ADMINISTRATOR	1977		1978		1979		1980		1981		1982	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
LEVEL 2	1314	29.9	1509	30.7	1348	28.1	1529	29.0	1532	27.3	1780	28.7
LEVEL 3	1323	30.1	1481	30.2	1487	31.1	1614	30.6	1803	32.1	1938	31.3
LEVEL 4	886	20.1	1044	21.2	1038	21.7	1097	20.8	1154	20.6	1323	21.3
LEVEL 5	575	13.1	583	11.9	613	12.8	691	13.1	737	13.1	759	12.2
LEVEL 6-7	298	6.8	293	6.0	303	6.3	344	6.5	388	6.9	403	6.5
TOTAL	4396	100.0	4910	100.0	4789	100.0	5275	100.0	5614	100.0	6203	100.0

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TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

FINANCIAL ADMINISTRATOR	1977		1978		1979		1980		1981		1982	
	MEAN	\$	MEAN	%	MEAN	\$	MEAN	%	MEAN	\$	MEAN	%
LEVEL 2	17149		19009	10.8	20623		22742	10.3	25501		28511	11.8
LEVEL 3	20424		22232	8.9	24224		26679	10.1	30239		33952	12.3
LEVEL 4	24348		26166	7.5	28295		31582	11.6	35667		39863	11.8
LEVEL 5	28580		31078	8.7	33662		37408	11.1	42467		47280	11.3
LEVEL 6-7	35118		36647	4.4	40178		45733	13.8	52002		57189	10.0
	Q-3	\$	Q-3	%	Q-3	\$	Q-3	%	Q-3	\$	Q-3	%
LEVEL 2	19010		21060	10.8	23100		25488	10.3	28308		31408	11.0
LEVEL 3	22250		24232	8.9	26352		29160	10.7	33000		37173	12.6
LEVEL 4	26162		28563	9.2	31075		34194	10.0	38880		43260	11.3
LEVEL 5	30940		33912	9.6	36889		40799	10.6	47046		52560	11.7
LEVEL 6-7	37714		39735	5.4	43414		49641	14.3	57084		63420	11.1

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

FINANCIAL ADMINISTRATOR	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	<u>1972 TO 1977</u>	<u>1977 TO 1982</u>	<u>1972 TO 1982</u>
	<u>%</u>	<u>%</u>	<u>%</u>
LEVEL 2	62.4	66.3	170.0
LEVEL 3	55.1	66.2	157.8
LEVEL 4	57.2	63.7	157.4
LEVEL 5	60.5	65.4	165.5
LEVEL 6-7	54.9	62.8	152.2

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

FINANCIAL ADMINISTRATOR	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
LEVEL 2	99.4	95.9	91.3	92.3	90.1	86.6
LEVEL 3	96.7	93.3	89.5	91.3	92.9	93.8
LEVEL 4	97.1	94.5	90.5	89.3	91.4	89.4
LEVEL 5	95.9	93.5	92.6	96.7	92.9	91.4
LEVEL 6-7	90.8	96.0	93.5	92.0	92.1	88.4
<u>QUEBEC</u>						
LEVEL 2	99.3	98.1	97.2	97.3	97.2	98.3
LEVEL 3	97.2	96.3	98.3	97.4	99.2	96.9
LEVEL 4	98.3	98.6	97.9	97.1	97.2	96.5
LEVEL 5	99.8	101.0	100.3	99.9	97.7	97.0
LEVEL 6-7	101.4	103.2	98.8	94.6	97.0	91.8
<u>ONTARIO</u>						
LEVEL 2	102.2	103.7	105.5	103.1	103.8	103.2
LEVEL 3	101.4	102.5	102.2	101.3	99.9	99.5
LEVEL 4	101.2	101.8	101.7	101.5	98.4	98.7
LEVEL 5	100.0	99.9	99.5	97.8	98.3	98.3
LEVEL 6-7	100.9	100.1	100.0	101.4	99.4	101.7
<u>PRAIRIES</u>						
LEVEL 2	95.6	93.2	90.6	95.2	95.4	96.7
LEVEL 3	99.8	97.6	97.1	99.6	99.7	104.2
LEVEL 4	100.6	97.9	99.4	101.0	104.0	106.9
LEVEL 5	102.1	98.9	100.5	103.2	105.0	107.0
LEVEL 6-7	99.6	97.7	103.3	108.0	108.6	110.2
<u>BRITISH COLUMBIA</u>						
LEVEL 2	107.5	107.3	107.4	109.3	109.0	105.4
LEVEL 3	105.4	107.3	103.3	105.3	106.8	105.3
LEVEL 4	101.7	103.3	102.8	102.1	105.8	100.7
LEVEL 5	97.6	102.4	103.6	103.2	104.2	100.9
LEVEL 6-7	96.0	98.4	99.3	97.7	96.6	95.7

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

FINANCIAL ADMINISTRATOR	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
LEVEL 2	102.6	96.1	98.1	100.6	100.8	100.4
LEVEL 3	101.2	95.8	97.0	100.9	100.7	104.6
LEVEL 4	104.2	100.5	101.6	103.9	105.9	108.2
LEVEL 5	106.5	99.8	103.3	105.6	104.4	106.7
LEVEL 6-7	99.0	95.8	101.2	106.3	104.7	105.6
<u>MANUFACTURING</u>						
LEVEL 2	100.6	97.7	97.7	97.0	97.5	96.2
LEVEL 3	100.0	98.3	99.1	98.9	99.2	98.3
LEVEL 4	98.1	98.2	98.4	97.6	96.7	96.7
LEVEL 5	100.5	99.5	99.3	97.6	97.9	98.5
LEVEL 6-7	101.8	103.1	101.2	101.5	102.5	102.1
<u>TRANSPORTATION & COMMUNICATION</u>						
LEVEL 2	101.0	104.1	104.1	104.4	101.9	103.3
LEVEL 3	98.7	100.7	98.5	98.6	100.2	98.8
LEVEL 4	102.8	98.8	98.8	100.8	101.7	100.1
LEVEL 5	98.1	100.6	98.0	102.5	101.5	100.0
LEVEL 6-7	96.7	97.0	97.5	95.9	96.1	95.4
<u>PUBLIC UTILITIES</u>						
LEVEL 2	109.8	118.2	114.9	113.6	111.7	113.6
LEVEL 3	107.9	114.4	111.8	111.0	105.5	106.0
LEVEL 4	101.8	111.3	107.7	108.8	107.7	109.6
LEVEL 5	105.1	110.4	111.7	111.1	111.4	110.1
LEVEL 6-7	92.8	105.3	104.9	99.2	103.0	104.1
<u>TRADE</u>						
LEVEL 2	73.4	94.4	91.2	94.2	89.8	89.6
LEVEL 3	87.2	92.7	95.9	97.8	95.8	95.4
LEVEL 4	93.9	99.9	106.0	102.9	95.1	96.1
LEVEL 5	83.6	88.4	86.7	91.6	93.6	92.1
LEVEL 6-7	*	88.5	88.1	89.4	80.5	80.7

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

FINANCIAL ADMINISTRATOR	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>FINANCE & INSURANCE</u>						
LEVEL 2	93.5	89.8	90.8	90.6	91.4	89.7
LEVEL 3	102.7	102.3	99.7	97.5	97.2	94.6
LEVEL 4	101.0	101.1	99.5	96.9	99.8	97.1
LEVEL 5	102.3	98.3	98.3	96.9	95.2	93.4
LEVEL 6-7	107.4	97.5	99.1	98.4	93.2	92.0
<u>SERVICE</u>						
LEVEL 2	95.3	98.4	97.9	96.1	97.7	99.9
LEVEL 3	94.8	98.4	97.3	96.1	98.4	97.6
LEVEL 4	98.2	99.3	95.9	94.5	97.8	98.5
LEVEL 5	97.9	99.4	97.4	97.5	96.6	95.6
LEVEL 6-7	96.8	102.1	100.4	96.1	98.6	97.1

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

FINANCIAL ADMINISTRATOR	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 2	77.3	80.4	79.7	79.6	78.4	78.2
LEVEL 3	92.0	94.0	93.6	93.3	92.9	93.1
LEVEL 4	109.7	110.7	109.3	110.5	109.6	109.3
LEVEL 5	128.8	131.4	130.1	130.9	130.5	129.7
LEVEL 6-7	158.2	155.0	155.3	160.0	159.8	156.8
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

INFORMATION OFFICER	1977		1979		1980		1981		1982	
	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>
LEVEL 1	82	4.3	29	3.0	81	10.0	100	10.3	85	9.3
LEVEL 2	837	44.3	327	33.8	190	23.5	290	30.0	251	27.4
LEVEL 3	455	24.1	214	22.2	200	24.8	219	22.6	217	23.7
LEVEL 4	255	13.5	208	21.5	191	23.7	192	19.9	191	20.8
LEVEL 5	177	9.4	142	14.7	94	11.7	114	11.8	121	13.2
LEVEL 6	61	3.2	38	3.9	42	5.2	45	4.7	40	4.3
LEVEL 7	22	1.2	9	0.9	9	1.1	7	0.7	12	1.3
TOTAL	1889	100.0	967	100.0	807	100.0	967	100.0	917	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

INFORMATION OFFICER	1977	1979		1980		1981		1982	
	MEAN \$	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%
LEVEL 1	11921	14531	21.9	16070	10.6	17537	9.1	20407	16.4
LEVEL 2	17897	20193	12.8	21661	7.3	24228	11.9	27984	15.5
LEVEL 3	19357	22972	18.7	24954	8.6	28679	14.9	31938	11.4
LEVEL 4	22674	27440	21.0	31169	13.6	34066	9.3	38221	12.2
LEVEL 5	25773	33352	29.4	36773	10.3	41298	12.3	46057	11.5
LEVEL 6	31604	37074	17.3	42841	15.6	48456	13.1	52419	8.2
LEVEL 7	35841	45458	26.8	50376	10.8	57612	14.4	64229	11.5
	Q-3 \$	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
LEVEL 1	13078	14768	12.9	17305	17.2	18637	7.7	22255	19.4
LEVEL 2	20089	22880	13.9	24130	5.5	26000	7.7	32136	23.6
LEVEL 3	20363	24700	21.3	27063	9.6	30833	13.9	34372	11.5
LEVEL 4	25176	29500	17.2	33649	14.1	37401	11.2	40612	8.6
LEVEL 5	28894	36723	27.1	40206	9.5	45881	14.1	50816	10.8
LEVEL 6	35050	40022	14.2	46418	16.0	52968	14.1	59745	12.8
LEVEL 7	41721	*	*	*	*	*	*	69795	*

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1973 TO 1982

INFORMATION OFFICER	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	<u>1973 TO 1977</u>	<u>1977 TO 1982</u>	<u>1973 TO 1982</u>
	%	%	%
LEVEL 1	30.6	71.2	123.6
LEVEL 2	53.2	56.4	139.5
LEVEL 3	45.8	65.0	140.6
LEVEL 4	38.3	68.6	133.2
LEVEL 5	25.8	78.7	124.9
LEVEL 6	36.3	65.9	126.1
LEVEL 7	17.8	79.2	111.1

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

INFORMATION OFFICER	1977 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>					
LEVEL 1	101.3	115.2	97.6	95.4	*
LEVEL 2	100.9	85.0	94.2	89.9	90.8
LEVEL 3	94.8	88.2	92.7	91.6	95.0
LEVEL 4	107.8	*	*	*	*
LEVEL 5	113.5	95.9	95.7	92.2	94.3
LEVEL 6	-	-	*	*	*
LEVEL 7	-	-	-	-	-
<u>QUEBEC</u>					
LEVEL 1	93.7	95.3	90.7	88.2	92.7
LEVEL 2	100.0	108.4	103.1	103.1	105.8
LEVEL 3	101.9	103.1	99.0	103.1	102.6
LEVEL 4	99.6	97.5	97.7	100.6	100.4
LEVEL 5	102.2	100.5	99.9	101.5	97.7
LEVEL 6	95.5	98.7	100.0	105.1	103.0
LEVEL 7	106.6	103.7	105.1	*	100.2
<u>ONTARIO</u>					
LEVEL 1	99.6	100.0	103.4	101.4	100.8
LEVEL 2	100.7	87.6	98.3	95.4	90.5
LEVEL 3	107.0	98.4	102.4	99.1	98.6
LEVEL 4	100.9	101.2	102.4	98.7	101.1
LEVEL 5	96.0	98.6	98.0	97.6	98.7
LEVEL 6	103.3	102.0	101.1	98.0	100.4
LEVEL 7	95.2	*	*	*	*
<u>PRAIRIES</u>					
LEVEL 1	*	106.1	*	106.1	107.2
LEVEL 2	100.0	86.1	91.5	93.4	91.0
LEVEL 3	91.2	98.1	95.2	101.6	103.5
LEVEL 4	102.9	100.6	94.8	94.7	94.5
LEVEL 5	101.3	100.7	105.5	104.4	108.0
LEVEL 6	*	*	*	*	*
LEVEL 7	*	*	-	-	-
<u>BRITISH COLUMBIA</u>					
LEVEL 1	108.9	-	*	*	*
LEVEL 2	96.8	102.6	107.2	102.3	102.9
LEVEL 3	95.9	103.3	105.7	104.5	98.8
LEVEL 4	96.6	110.5	104.1	112.6	103.8
LEVEL 5	105.8	104.8	*	105.0	103.6
LEVEL 6	105.3	101.2	98.9	98.5	96.6
LEVEL 7	*	-	*	*	*

TABLE 8
INDUSTRIAL DIFFERENTIAL IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

INFORMATION OFFICER	1977 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>					
LEVEL 1	(a)	-	-	-	-
LEVEL 2	(a)	91.1	*	*	*
LEVEL 3	(a)	100.4	104.1	107.4	109.2
LEVEL 4	(a)	*	*	-	*
LEVEL 5	(a)	105.3	*	*	*
LEVEL 6	(a)	*	*	*	*
LEVEL 7	*	*	-	-	-
<u>MANUFACTURING</u>					
LEVEL 1	104.6(a)	99.9	107.4	101.8	97.4
LEVEL 2	97.7(a)	106.9	98.5	104.1	109.7
LEVEL 3	96.6(a)	100.6	107.3	100.8	103.0
LEVEL 4	95.2(a)	96.4	104.4	96.6	99.7
LEVEL 5	91.0(a)	99.0	96.7	102.4	99.7
LEVEL 6	96.7(a)	94.9	96.4	89.8	97.4
LEVEL 7	*	*	*	*	*
<u>TRANSPORTATION & COMMUNICATION</u>					
LEVEL 1	102.6(b)	*	96.9	*	103.2
LEVEL 2	103.3(b)	91.2	100.3	100.4	98.2
LEVEL 3	104.5(b)	98.3	92.7	98.0	97.1
LEVEL 4	103.3(b)	99.1	92.5	96.3	95.1
LEVEL 5	108.0(b)	102.2	96.0	95.6	95.8
LEVEL 6	106.3(b)	103.0	100.5	105.2	105.0
LEVEL 7	105.0(b)	103.7	96.5	*	99.6

(a) Mining and Manufacturing combined.

(b) Transportation, Communication and Public Utilities combined.

TABLE 8
INDUSTRIAL DIFFERENTIAL IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

INFORMATION OFFICER	1977 %	1979 %	1980 %	1981 %	1982 %
<u>PUBLIC UTILITIES</u>					
LEVEL 1	(b)	-	*	*	*
LEVEL 2	(b)	101.6	105.6	100.5	96.7
LEVEL 3	(b)	105.1	104.5	105.6	107.2
LEVEL 4	(b)	103.9	104.6	107.4	107.2
LEVEL 5	(b)	102.2	104.7	105.4	106.3
LEVEL 6	(b)	*	*	*	*
LEVEL 7	(b)	-	-	-	-
<u>TRADE</u>					
LEVEL 1	*	-	-	*	*
LEVEL 2	*	*	*	*	*
LEVEL 3	-	-	-	*	*
LEVEL 4	-	-	-	*	*
LEVEL 5	*	*	-	*	*
LEVEL 6	-	-	-	*	*
LEVEL 7	-	-	-	-	-
<u>FINANCE & INSURANCE</u>					
LEVEL 1	*	-	-	-	-
LEVEL 2	80.7	79.8	79.5	77.9	76.4
LEVEL 3	98.1	92.0	101.2	90.2	83.0
LEVEL 4	91.9	101.7	93.9	80.8	89.0
LEVEL 5	109.4	92.1	90.8	82.3	79.4
LEVEL 6	108.7	95.3	97.6	88.4	95.0
LEVEL 7	*	*	-	-	-
<u>SERVICE</u>					
LEVEL 1	92.8	96.8	92.2	91.5	89.9
LEVEL 2	78.6	90.3	102.3	97.6	92.6
LEVEL 3	103.9	99.7	102.5	99.9	99.0
LEVEL 4	105.6	103.5	101.8	102.1	99.8
LEVEL 5	119.5	107.2	101.0	94.9	96.9
LEVEL 6	93.5	105.3	107.2	101.3	*
LEVEL 7	*	-	*	*	*

(b) Transportation, Communication and Public Utilities combined.

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

INFORMATION OFFICER	1977 %	1979 %	1980 %	1981 %	1982 %
LEVEL 1	53.7	56.2	56.2	53.9	56.0
LEVEL 2	80.6	78.0	75.8	74.5	76.7
LEVEL 3	87.2	88.8	87.3	88.1	87.6
LEVEL 4	102.2	106.0	109.1	104.7	104.8
LEVEL 5	116.1	128.9	128.7	126.9	126.3
LEVEL 6	142.4	143.3	149.9	148.9	143.8
LEVEL 7	161.5	175.7	176.3	177.1	176.1
MEAN RATE ENGINEER 3	\$22196	\$25878	\$28580	\$32535	\$36463

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1978 TO 1981

PERSONNEL ADMINISTRATOR	1978		1979		1980		1981	
	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>
LEVEL 1	312	8.2	302	7.6	315	8.1	275	7.8
LEVEL 2	970	25.5	1026	26.0	954	24.5	850	24.0
LEVEL 3	875	23.0	876	22.2	855	21.9	709	20.1
LEVEL 4	687	18.1	659	16.7	655	16.8	641	18.1
LEVEL 5	480	12.6	579	14.6	589	15.1	566	16.0
LEVEL 6	292	7.7	310	7.8	326	8.3	307	8.7
LEVEL 7	186	4.9	200	5.1	206	5.3	189	5.3
TOTAL	3802	100.0	3952	100.0	3900	100.0	3537	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1978 TO 1981

PERSONNEL ADMINISTRATOR	1978	1979		1980		1981	
	MEAN \$	MEAN \$	%	MEAN \$	%	MEAN \$	%
LEVEL 1	15821	17306	9.4	18802	8.6	20443	8.7
LEVEL 2	19425	20983	8.0	23335	11.2	26169	12.1
LEVEL 3	22354	24113	7.9	26311	9.1	28885	9.8
LEVEL 4	26039	27331	5.0	30332	11.0	33848	11.6
LEVEL 5	28958	31065	7.3	33596	8.1	37414	11.4
LEVEL 6	32333	34252	5.9	37307	8.9	41762	11.9
LEVEL 7	37709	40044	6.2	44098	10.1	49313	11.8
	Q-3 \$	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
LEVEL 1	17185	18854	9.7	20546	9.0	22724	10.6
LEVEL 2	20918	22920	9.6	25900	13.0	29300	13.1
LEVEL 3	24250	25450	4.9	28132	10.5	31100	10.6
LEVEL 4	27900	29500	5.7	33000	11.9	36600	10.9
LEVEL 5	31320	33432	6.7	36160	8.2	40128	11.0
LEVEL 6	34485	36564	6.0	40402	10.5	45393	12.4
LEVEL 7	41280	43426	5.2	47986	10.5	54054	12.6

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1973 TO 1981

PERSONNEL ADMINISTRATOR	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	<u>1973 TO 1976(a)</u>	<u>1978 TO 1981(a)</u>	<u>1973 TO 1981(a)</u>
	%	%	%
LEVEL 1	34.8	29.2	90.7
LEVEL 2	33.9	34.7	104.5
LEVEL 3	31.2	29.2	90.1
LEVEL 4	36.4	30.0	97.2
LEVEL 5	32.2	29.2	92.5
LEVEL 6	39.2	29.2	96.1
LEVEL 7	33.3	30.8	92.4

(a) No report in 1972 and no full report in 1982 for Personnel Administrator.

Source: Pay Research Bureau

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1978 TO 1981

PERSONNEL ADMINISTRATOR	1978 %	1979 %	1980 %	1981 %
<u>ATLANTIC PROVINCES</u>				
LEVEL 1	99.9	97.2	96.9	96.9
LEVEL 2	97.5	98.2	94.8	93.9
LEVEL 3	90.1	90.2	90.2	91.1
LEVEL 4	91.4	96.3	94.4	91.4
LEVEL 5	89.8	87.6	88.4	89.0
LEVEL 6	*	99.6	102.0	101.6
LEVEL 7	80.1	82.7	83.0	81.1
<u>QUEBEC</u>				
LEVEL 1	100.7	102.8	102.5	102.9
LEVEL 2	100.6	103.2	106.2	105.2
LEVEL 3	102.5	108.6	115.0	110.5
LEVEL 4	102.0	103.8	105.3	105.7
LEVEL 5	105.2	107.4	108.0	101.9
LEVEL 6	102.2	102.7	101.1	100.0
LEVEL 7	101.9	102.8	101.4	98.2
<u>ONTARIO</u>				
LEVEL 1	101.5	100.1	103.4	103.5
LEVEL 2	99.9	99.5	99.1	101.5
LEVEL 3	100.6	100.1	97.8	98.0
LEVEL 4	99.9	101.3	100.6	99.5
LEVEL 5	97.7	96.3	95.6	101.7
LEVEL 6	99.2	100.9	100.5	99.8
LEVEL 7	101.0	102.3	100.9	102.7
<u>PRAIRIES</u>				
LEVEL 1	94.3	93.1	91.5	94.3
LEVEL 2	98.6	97.2	94.2	92.7
LEVEL 3	98.0	96.9	97.7	99.2
LEVEL 4	95.3	96.2	97.2	99.2
LEVEL 5	96.2	95.3	96.2	94.6
LEVEL 6	96.8	98.6	101.6	102.6
LEVEL 7	97.3	97.2	101.7	103.0
<u>BRITISH COLUMBIA</u>				
LEVEL 1	106.1	105.8	101.1	103.7
LEVEL 2	102.5	99.2	100.4	93.9
LEVEL 3	99.9	96.7	96.8	96.4
LEVEL 4	101.4	96.9	96.4	96.0
LEVEL 5	107.3	101.1	102.6	100.3
LEVEL 6	102.4	95.7	95.7	97.9
LEVEL 7	105.5	97.3	99.0	100.8

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1978 TO 1981

PERSONNEL	1978	1979	1980	1981
ADMINISTRATOR	%	%	%	%

MINING & MANUFACTURING

LEVEL 1	106.0	108.3	110.7	106.4
LEVEL 2	99.9	96.7	96.1	95.6
LEVEL 3	101.6	100.3	101.0	100.8
LEVEL 4	100.2	100.9	102.7	103.4
LEVEL 5	103.0	99.7	102.7	100.3
LEVEL 6	102.9	105.5	105.9	103.7
LEVEL 7	104.8	106.3	105.7	106.0

TRANSPORTATION, COMMUNICATIONS & PUBLIC UTILITIES

LEVEL 1	106.7	113.1	117.7	111.7
LEVEL 2	102.4	104.1	107.1	106.7
LEVEL 3	103.6	106.7	110.6	109.3
LEVEL 4	100.8	105.0	104.6	105.4
LEVEL 5	107.9	109.0	110.9	110.3
LEVEL 6	97.9	99.2	101.1	101.3
LEVEL 7	101.4	101.7	102.9	100.9

FINANCE, INSURANCE & TRADE

LEVEL 1	93.5	91.8	91.8	93.5
LEVEL 2	94.9	95.4	95.2	91.2
LEVEL 3	91.1	93.0	93.7	94.2
LEVEL 4	89.4	93.8	93.4	93.3
LEVEL 5	96.7	98.8	97.6	95.3
LEVEL 6	99.6	98.9	100.2	95.9
LEVEL 7	96.6	98.1	101.6	98.7

SERVICE

LEVEL 1	100.6	99.1	95.9	99.7
LEVEL 2	98.5	96.9	92.2	89.3
LEVEL 3	98.9	96.6	93.1	91.5
LEVEL 4	104.6	92.5	91.5	90.3
LEVEL 5	92.6	95.0	91.6	94.6
LEVEL 6	97.4	93.3	90.6	94.9
LEVEL 7	91.7	91.0	88.0	91.6

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1978 TO 1981

PERSONNEL ADMINISTRATOR	1978 %	1979 %	1980 %	1981 %
LEVEL 1	66.9	66.9	65.8	62.8
LEVEL 2	82.1	81.1	81.6	80.4
LEVEL 3	94.5	93.2	92.1	88.8
LEVEL 4	110.1	105.6	106.1	104.0
LEVEL 5	122.5	120.0	117.6	115.0
LEVEL 6	136.7	132.4	130.5	128.4
LEVEL 7	159.5	154.7	154.3	151.6
MEAN RATE ENGINEER 3	\$23647	\$25878	\$28580	\$32535

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

PURCHASING AGENT	1977		1979		1980		1981		1982	
	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>	<u>NO.OF</u> <u>OBS.</u>	<u>% OF</u> <u>TOTAL</u>
LEVEL 2	478	48.2	513	43.8	510	43.9	537	43.1	598	42.7
LEVEL 3	351	35.4	458	39.1	502	43.2	515	41.4	474	33.8
LEVEL 4	130	13.1	161	13.8	116	10.0	160	12.9	254	18.1
LEVEL 5	33	3.3	39	3.3	34	2.9	33	2.6	75	5.4
TOTAL	992	100.0	1171	100.0	1162	100.0	1245	100.0	1401	100.0

TABLE 5
MEAN & THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

PURCHASING AGENT	1977 MEAN	1979 MEAN	1980 MEAN		1981 MEAN		1982 MEAN	
	\$	\$	\$	%	\$	%	\$	%
LEVEL 2	15616	20176	22519	11.6	24998	11.0	28383	13.5
LEVEL 3	19108	23577	26333	11.7	29107	10.5	32138	10.4
LEVEL 4	21615	26836	30057	12.0	35252	17.3	40125	13.8
LEVEL 5	25753	30493	36283	19.0	41617	14.7	46157	10.9
	Q-3 \$	Q-3 \$	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
LEVEL 2	16944	22319	25270	13.2	27231	7.8	31841	16.2
LEVEL 3	20904	25751	28654	11.3	31850	11.2	35902	12.7
LEVEL 4	24342	29283	32863	12.2	39866	21.3	45030	13.0
LEVEL 5	28530	34216	38433	12.3	44696	16.3	50752	13.5

% represents percentage increase over previous year

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1973 TO 1982

PURCHASING AGENT	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	<u>1973 TO 1977</u>	<u>1977 TO 1982</u>	<u>1973 TO 1982</u>
	%	%	%
LEVEL 2	35.4	81.8	146.1
LEVEL 3	44.5	68.2	143.0
LEVEL 4	33.0	85.6	146.8
LEVEL 5	36.0	79.2	143.8

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

PURCHASING AGENT	1977 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>					
LEVEL 2	103.6	85.0	80.5	84.4	89.3
LEVEL 3	103.4	85.9	102.9	90.8	94.8
LEVEL 4	*	*	-	-	*
LEVEL 5	-	*	-	-	*
<u>QUEBEC</u>					
LEVEL 2	99.5	108.5	98.2	99.2	95.7
LEVEL 3	102.5	100.5	95.7	99.0	98.0
LEVEL 4	102.4	99.7	95.7	88.2	89.4
LEVEL 5	99.8	109.9	91.1	90.6	96.2
<u>ONTARIO</u>					
LEVEL 2	101.9	87.6	103.0	99.1	100.2
LEVEL 3	98.0	95.8	103.0	101.9	101.2
LEVEL 4	97.4	103.5	101.5	102.9	102.9
LEVEL 5	98.1	107.8	103.5	101.3	100.3
<u>PRAIRIES</u>					
LEVEL 2	95.4	86.2	94.0	105.1	106.9
LEVEL 3	100.0	95.6	96.5	96.2	100.1
LEVEL 4	102.4	102.9	106.4	106.7	107.8
LEVEL 5	102.8	110.2	*	*	103.1
<u>BRITISH COLUMBIA</u>					
LEVEL 2	100.3	102.7	106.9	103.4	101.6
LEVEL 3	98.5	100.7	104.9	103.7	102.2
LEVEL 4	*	112.9	-	*	103.1
LEVEL 5	*	114.6	-	-	*

Source: Pay Research Bureau

TABLE 8
INDUSTRIAL DIFFERENTIAL IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

PURCHASING AGENT	1977 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>					
LEVEL 2	(a)	105.9	108.9	116.0	115.5
LEVEL 3	(a)	104.5	108.9	110.2	110.9
LEVEL 4	(a)	*	*	*	105.0
LEVEL 5	-	*	*	*	*
<u>MANUFACTURING</u>					
LEVEL 2	105.9(a)	101.8	102.2	100.3	96.5
LEVEL 3	100.0(a)	99.4	100.9	99.6	97.8
LEVEL 4	105.4(a)	102.6	99.4	95.8	95.2
LEVEL 5	100.8(a)	99.9	102.9	101.1	97.2
<u>TRANSPORTATION & COMMUNICATION</u>					
LEVEL 2	100.4	105.6	94.3	96.4	101.1
LEVEL 3	101.7	105.6	97.3	99.2	99.3
LEVEL 4	95.7	100.3	93.4	87.6	97.7
LEVEL 5	*	*	*	*	102.6
<u>PUBLIC UTILITIES</u>					
LEVEL 2	96.7	97.8	99.4	97.4	99.9
LEVEL 3	105.3	100.3	99.0	100.8	106.5
LEVEL 4	*	*	*	*	109.4
LEVEL 5	*	*	*	*	107.9
<u>TRADE</u>					
LEVEL 2	*	89.8	99.0	91.2	104.7
LEVEL 3	*	101.4	103.0	97.5	87.0
LEVEL 4	*	-	-	-	*
LEVEL 5	-	-	-	-	-
<u>FINANCE & INSURANCE</u>					
LEVEL 2	95.6	101.8	94.0	97.6	98.4
LEVEL 3	104.4	107.2	113.2	111.4	112.5
LEVEL 4	-	-	-	-	-
LEVEL 5	-	-	-	-	*
<u>SERVICE</u>					
LEVEL 2	91.1	90.6	93.6	95.3	97.2
LEVEL 3	91.1	93.2	92.5	95.6	98.9
LEVEL 4	87.1	94.7	*	*	92.2
LEVEL 5	*	*	*	*	95.9

(a) Manufacturing and Mining combined.

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

PURCHASING AGENT	1977 %	1979 %	1980 %	1981 %	1982 %
LEVEL 2	70.4	78.0	78.8	76.8	77.8
LEVEL 3	86.1	91.1	92.1	89.5	88.1
LEVEL 4	97.4	103.7	105.2	108.4	110.0
LEVEL 5	116.0	117.8	127.0	127.9	126.6
MEAN RATE ENGINEER 3	\$22196	\$25878	\$28580	\$32535	\$36463

SECTION 3

ADMINISTRATIVE SUPPORT CLASSES

Administrative Support Classes:

In analyzing the data presented in this section, users should be aware that the data for the 1977 to 1982 period are derived from Pay Research Bureau surveys. In the 1972 to 1977 report, the data on office classes were obtained from the Wage Rate Survey.

Trends in Survey Coverage

<u>CLASS</u>		Percentage Increases (Decreases)	
		No. of	No. of
		Orgs. <u>%</u>	Empls. <u>%</u>
CLERK	(1977 - 1982)	6.8	22.9
DATA PROCESSOR (CONVERSION)	(1977 - 1982)	unchanged	(9.9)
DATA PROCESSOR (PRODUCTION)	(1977 - 1982)	6.3	18.6
TYPIST	(1977 - 1982)	(4.0)	9.8
STENOGRAPHER	(1977 - 1982)	(9.3)	(41.8)
SECRETARY	(1977 - 1982)	10.0	33.0

TABLE I
SURVEY COVERAGE BY CLASS - CANADA
1977 TO 1982

ADMINISTRATIVE SUPPORT CLASSES	1977		1978		1979		1980		1981		1982	
	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.
CLERK	161	61799	171	69075	167	71295	171	71116	163	72822	172	75942
DATA PROCESSOR (CONVERSION)	155	3931	160	3961	155	3793	157	3776	151	3356	155	3540
DATA PROCESSOR (PRODUCTION)	144	2860	153	2774	148	2865	155	3008	143	2870	153	3392
TYPIST TYP	126	7410	138	7992	130	7786	131	7306	119	7829	121	8134
STENOGRAPHER STN	107	6260	119	6561	117	6428	113	5854	99	4284	97	3641
SECRETARY SCY	150	8553	163	8636	163	8920	157	8276	158	10266	165	11372

TABLE 2
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR REGIONS
1977 TO 1982

ADMINISTRATIVE SUPPORT CLASSES	ATLANTIC PROVINCES						QUEBEC					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CLERK	5.3	5.8	5.2	5.4	5.5	4.7	26.2	26.0	26.4	26.3	26.2	25.5
DATA PROCESSOR (CONVERSION)	4.0	4.6	4.5	4.7	5.5	4.5	27.0	26.8	23.4	22.9	24.9	24.1
DATA PROCESSOR (PRODUCTION)	3.2	4.0	4.0	4.1	4.4	3.4	25.2	27.8	25.2	24.2	25.2	24.9
TYPIST TYP	4.7	6.8	5.8	5.6	6.5	5.9	27.0	26.6	24.7	26.5	27.2	25.3
STENOGRAPHER STN	4.4	6.3	6.0	7.0	7.2	3.9	28.0	25.2	22.1	21.3	22.7	22.2
SECRETARY SCY	3.9	5.6	5.3	5.2	5.0	4.2	28.6	25.5	27.1	25.9	27.3	26.7
	ONTARIO						PRAIRIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CLERK	43.0	42.2	42.0	41.4	40.9	42.3	16.1	15.5	16.1	16.2	16.8	17.2
DATA PROCESSOR (CONVERSION)	40.9	43.7	44.1	45.1	42.1	43.7	16.1	15.9	17.8	16.7	17.2	17.7
DATA PROCESSOR (PRODUCTION)	50.8	44.8	45.9	44.1	43.7	44.8	13.1	13.3	15.7	17.7	16.7	17.3
TYPIST TYP	35.5	35.0	34.4	35.9	37.5	35.1	19.0	18.1	22.1	19.8	15.8	19.9
STENOGRAPHER STN	35.5	36.1	35.6	36.4	34.2	34.6	18.8	20.1	23.4	22.9	25.0	29.1
SECRETARY SCY	46.3	45.7	45.7	47.2	41.2	42.1	12.7	14.3	13.4	13.2	18.5	19.0
	BRITISH COLUMBIA											
	1977	1978	1979	1980	1981	1982						
	%	%	%	%	%	%						
CLERK	9.4	10.5	10.3	10.7	10.6	10.3						
DATA PROCESSOR (CONVERSION)	12.0	9.0	10.2	10.6	10.3	10.0						
DATA PROCESSOR (PRODUCTION)	7.7	10.1	9.2	9.9	10.0	9.6						
TYPIST TYP	13.8	13.5	13.0	12.2	13.0	13.8						
STENOGRAPHER STN	13.3	12.3	12.9	12.4	10.9	10.2						
SECRETARY SCY	8.5	8.9	8.5	8.5	8.0	8.0						

TABLE 3
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR INDUSTRIES
1977 TO 1982

ADMINISTRATIVE SUPPORT CLASSES	MINING						MANUFACTURING					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CLERK	3.1	2.8	2.6	2.7	3.0	3.0	15.1	13.6	14.3	12.6	11.5	11.1
DATA PROCESSOR (CONVERSION)	4.5	4.5	3.8	4.3	4.3	5.7	28.3	30.0	29.0	27.0	26.1	24.1
DATA PROCESSOR (PRODUCTION)	4.8	5.2	4.1	4.8	5.4	6.3	22.2	22.3	24.0	23.2	22.4	20.3
TYPIST TYP	2.3	1.8	1.6	1.5	1.5	1.2	12.1	12.1	12.3	12.2	8.6	7.3
STENOGRAPHER STN	4.7	4.1	4.0	4.2	5.9	6.9	25.5	25.7	23.1	21.6	28.9	30.9
SECRETARY SCY	4.6	4.9	5.1	7.0	8.3	8.7	28.5	29.3	31.4	35.7	27.5	25.8
	TRANSPORTATION AND COMMUNICATIONS						PUBLIC UTILITIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CLERK	21.0	25.4	26.9	27.1	25.9	24.9	8.1	8.7	8.5	9.1	9.7	9.8
DATA PROCESSOR (CONVERSION)	15.1	14.9	19.4	18.2	18.9	21.4	7.1	7.2	7.0	7.7	8.5	7.8
DATA PROCESSOR (PRODUCTION)	17.3	18.2	20.1	20.2	18.2	17.3	13.4	7.6	8.1	8.5	10.2	10.8
TYPIST TYP	5.4	5.4	7.4	7.8	4.6	5.5	9.1	9.9	9.7	13.2	11.3	11.8
STENOGRAPHER STN	8.7	12.1	12.2	12.6	14.3	16.3	9.2	7.8	7.4	8.5	12.6	12.5
SECRETARY SCY	16.7	11.1	11.1	10.5	10.3	10.5	5.6	6.8	7.1	6.2	10.1	9.8
	TRADE						FINANCE AND INSURANCE					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CLERK	2.7	3.0	2.9	3.2	3.5	4.1	41.9	38.1	36.5	36.9	38.8	38.0
DATA PROCESSOR (CONVERSION)	5.3	4.5	4.3	5.1	2.9	4.1	30.6	28.9	26.6	27.2	28.7	25.5
DATA PROCESSOR (PRODUCTION)	8.3	4.4	3.0	3.3	3.6	2.1	21.3	22.7	21.6	21.2	21.7	20.5
TYPIST TYP	1.0	1.1	1.0	1.5	0.8	0.9	56.6	50.8	48.2	45.4	60.8	57.4
STENOGRAPHER STN	0.4	0.2	0.2	1.0	0.7	0.6	42.4	40.2	41.5	40.3	21.6	16.2
SECRETARY SCY	1.6	3.5	3.1	4.1	4.0	3.8	21.7	20.8	18.7	10.0	19.1	21.4
	SERVICE											
	1977	1978	1979	1980	1981	1982						
	%	%	%	%	%	%						
CLERK	8.1	8.4	8.3	8.4	7.6	9.1						
DATA PROCESSOR (CONVERSION)	9.1	10.0	9.9	10.5	10.6	11.4						
DATA PROCESSOR (PRODUCTION)	12.7	19.6	19.1	18.8	18.5	22.7						
TYPIST TYP	13.5	18.9	19.8	18.4	12.4	15.8						
STENOGRAPHER STN	9.1	9.9	11.6	11.8	15.0	16.6						
SECRETARY SCY	21.3	23.6	23.5	26.5	20.7	20.0						

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

CLERK	1977		1978		1979		1980		1981		1982	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
LEVEL 1	5725	9.3	6959	10.1	6405	9.0	5886	8.3	5512	7.6	5097	6.7
LEVEL 2	10201	16.5	11052	16.0	11170	15.7	10888	15.3	11403	15.6	11315	14.9
LEVEL 3	22823	36.9	26659	38.6	27881	39.1	28977	40.7	29255	40.2	30704	40.4
LEVEL 4	18740	30.3	21136	30.6	23067	32.3	23165	32.6	23972	32.9	25780	34.0
LEVEL 5	4310	7.0	3269	4.7	2772	3.9	2200	3.1	2680	3.7	3046	4.0
TOTAL	61799	100.0	69075	100.0	71295	100.0	71116	100.0	72822	100.0	75942	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

CLERK	1977	1978		1979		1980		1981		1982	
	MEAN \$	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%
LEVEL 1	7753	8598	10.9	9510	10.6	10461	10.0	11812	12.9	13526	14.5
LEVEL 2	9366	10068	7.5	10924	8.5	12153	11.3	13638	12.2	15399	12.9
LEVEL 3	10072	11084	10.0	12251	10.5	13575	10.8	15214	12.1	17246	13.4
LEVEL 4	11047	12272	11.1	13532	10.3	15038	11.1	17039	13.3	19393	13.8
LEVEL 5	12928	15349	18.7	16719	8.9	19087	14.2	20906	9.5	23349	11.7
	Q-3 \$	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
LEVEL 1	8299	9300	12.1	10300	10.8	11300	12.6	12776	13.1	14600	14.3
LEVEL 2	10320	11000	6.6	11900	8.2	13150	10.5	14904	13.3	16810	12.8
LEVEL 3	11039	12216	10.7	13350	9.3	14750	10.5	16412	11.3	18564	13.1
LEVEL 4	12200	13836	13.4	14843	7.3	16444	10.8	18509	12.6	20976	13.3
LEVEL 5	14300	17220	20.4	18474	7.3	21805	18.0	23427	7.4	25916	10.6

% represents percentage Increase over previous year

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

CLERKS	FIVE YEAR PERIOD PERCENTAGE INCREASE <u>1977 TO 1982</u> %
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LEVEL 1	74.5
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LEVEL 2	64.4
---------	------

LEVEL 3	71.2
---------	------

LEVEL 4	75.5
---------	------

LEVEL 5	80.6
---------	------

	<u>1972 TO 1977</u> %
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CLERK	
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JUNIOR	74.1
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INTERMEDIATE	65.5
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SENIOR	59.2
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TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

CLERK	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
LEVEL 1	92.0	93.5	92.1	93.0	92.3	89.0
LEVEL 2	85.8	91.3	87.8	91.6	91.7	89.8
LEVEL 3	87.8	89.2	85.8	87.7	90.1	88.9
LEVEL 4	86.1	93.9	90.7	90.7	91.5	90.1
LEVEL 5	83.1	86.4	83.8	81.0	91.0	90.7
<u>QUEBEC</u>						
LEVEL 1	99.7	98.5	97.8	99.1	98.9	98.8
LEVEL 2	99.3	100.4	100.7	101.5	101.6	99.9
LEVEL 3	102.2	99.6	99.9	100.9	100.8	100.8
LEVEL 4	99.8	99.8	99.1	100.0	99.7	99.9
LEVEL 5	102.8	100.0	99.0	101.3	101.5	100.1
<u>ONTARIO</u>						
LEVEL 1	101.2	103.0	104.5	101.8	101.4	99.8
LEVEL 2	83.8	100.2	101.3	100.6	98.6	98.3
LEVEL 3	100.1	99.8	99.8	99.4	98.0	97.4
LEVEL 4	92.2	97.6	98.9	98.1	98.3	98.2
LEVEL 5	100.4	101.8	102.1	102.0	98.9	99.4
<u>PRAIRIES</u>						
LEVEL 1	96.2	95.4	93.4	96.1	96.2	99.4
LEVEL 2	79.6	94.0	94.7	95.8	96.7	98.5
LEVEL 3	98.1	97.2	97.9	99.0	100.5	101.0
LEVEL 4	105.4	104.6	103.7	105.2	106.3	105.9
LEVEL 5	97.6	95.3	97.9	95.7	99.6	99.2
<u>BRITISH COLUMBIA</u>						
LEVEL 1	107.9	106.0	106.4	107.0	108.2	107.6
LEVEL 2	89.3	113.2	111.5	106.2	111.6	113.4
LEVEL 3	102.9	110.1	109.7	107.2	108.8	109.9
LEVEL 4	111.9	112.2	110.8	109.9	108.9	109.0
LEVEL 5	107.5	107.1	106.6	104.9	104.9	107.3

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

CLERK	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
LEVEL 1	115.2	114.2	107.9	113.7	113.6	113.6
LEVEL 2	119.5	115.3	117.1	115.0	116.2	118.8
LEVEL 3	132.7	118.6	127.2	121.6	124.8	125.0
LEVEL 4	137.1	132.1	129.4	125.1	131.5	127.9
LEVEL 5	138.5	125.1	125.4	121.1	126.2	123.0
<u>MANUFACTURING</u>						
LEVEL 1	108.4	110.2	110.6	106.3	104.7	101.5
LEVEL 2	105.1	106.2	108.0	109.4	108.6	105.6
LEVEL 3	111.9	111.1	109.3	111.2	112.8	110.7
LEVEL 4	118.8	116.0	113.7	114.5	114.6	111.9
LEVEL 5	113.7	108.1	102.9	108.1	112.0	107.9
<u>TRANSPORTATION & COMMUNICATION</u>						
LEVEL 1	103.2	101.4	99.3	97.9	102.8	104.6
LEVEL 2	102.4	106.5	101.7	99.1	105.1	107.4
LEVEL 3	95.1	100.0	99.2	97.0	98.9	99.7
LEVEL 4	89.4	92.1	92.6	92.7	93.9	94.4
LEVEL 5	99.7	103.9	98.4	91.6	111.9	109.5
<u>PUBLIC UTILITIES</u>						
LEVEL 1	103.0	106.6	106.8	103.6	103.9	105.6
LEVEL 2	116.1	106.5	105.2	107.1	105.3	106.4
LEVEL 3	119.2	119.3	113.5	116.5	111.3	112.6
LEVEL 4	122.8	124.4	121.1	123.4	118.3	118.9
LEVEL 5	117.1	118.1	118.1	117.7	117.3	118.9
<u>TRADE</u>						
LEVEL 1	106.1	93.9	96.7	99.4	104.2	92.4
LEVEL 2	93.1	90.7	91.2	92.9	92.2	86.5
LEVEL 3	97.4	95.5	92.0	94.5	92.2	85.7
LEVEL 4	91.3	94.7	92.9	85.0	83.9	78.8
LEVEL 5	90.2	82.3	79.2	76.2	70.7	68.1
<u>FINANCE & INSURANCE</u>						
LEVEL 1	94.7	96.7	96.8	97.9	96.4	97.3
LEVEL 2	88.3	93.8	94.3	94.5	93.5	94.1
LEVEL 3	92.0	92.1	93.4	94.1	94.1	94.6
LEVEL 4	95.9	95.6	96.3	96.4	95.3	95.1
LEVEL 5	93.9	89.8	91.8	88.6	91.9	94.6
<u>SERVICE</u>						
LEVEL 1	99.2	94.1	94.5	98.0	96.7	96.0
LEVEL 2	98.1	91.1	95.2	95.9	94.1	95.9
LEVEL 3	107.9	99.1	99.5	100.9	101.5	101.9
LEVEL 4	108.7	103.4	107.0	105.8	104.0	105.3
LEVEL 5	92.9	95.0	97.9	94.7	95.5	97.5

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

CLERK	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 1	34.9	36.4	36.7	36.6	36.3	37.1
LEVEL 2	42.2	42.6	42.2	42.6	41.9	42.2
LEVEL 3	45.4	46.9	47.3	47.5	46.8	47.3
LEVEL 4	49.8	51.9	52.3	52.7	52.4	53.2
LEVEL 5	58.2	64.9	64.6	66.8	64.3	64.0
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

DATA PROCESSOR (CONVERSION)	1977		1978		1979		1980		1981		1982	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
LEVEL 1	722	18.4	562	14.2	510	13.4	509	13.5	308	9.2	266	7.5
LEVEL 2	2550	64.9	2606	65.8	2510	66.2	2475	65.5	2282	68.0	2334	65.9
LEVEL 3	508	12.9	622	15.7	623	16.4	634	16.8	631	18.8	818	23.1
LEVEL 5	151	3.8	171	4.3	150	4.0	158	4.2	135	4.0	122	3.5
TOTAL	3931	100.0	3961	100.0	3793	100.0	3776	100.0	3356	100.0	3540	100.0

TABLE 5
MEAN AND THIRD QUANTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

DATA PROCESSOR (CONVERSION)	1977		1978		1979		1980		1981		1982	
	MEAN	%	MEAN	%	MEAN	%	MEAN	%	MEAN	%	MEAN	%
	\$		\$		\$		\$		\$		\$	
LEVEL 1	9060	4.7	9485	4.7	10215	7.7	11616	13.7	13248	14.0	15440	16.5
LEVEL 2	10275	8.0	11097	8.0	12300	10.8	13693	11.3	15121	10.4	17089	13.0
LEVEL 3	11698	8.0	12632	8.0	14008	10.9	15380	9.8	17334	12.7	19182	10.7
LEVEL 5	14607	5.5	15417	5.5	19088	23.8	20981	9.9	23401	11.5	26476	13.1
	Q-3		Q-3		Q-3		Q-3		Q-3		Q-3	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL 1	9649	4.6	10090	4.6	11050	9.5	12175	10.2	14300	17.5	16576	15.9
LEVEL 2	11279	6.5	12014	6.5	13338	11.0	14619	9.6	16541	13.1	18700	13.1
LEVEL 3	12300	11.7	13739	11.7	14952	8.8	16110	7.7	18420	14.3	20777	12.8
LEVEL 5	16225	5.8	17160	5.8	22984	33.9	24525	6.7	29200	19.1	32733	12.1

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

DATA PROCESSORS (CONVERSION)	FIVE YEAR PERIOD PERCENTAGE INCREASE <u>1977 TO 1982</u>
	%
LEVEL 1	70.4
LEVEL 2	66.3
LEVEL 3	64.0
LEVEL 5	81.3
KEY PUNCH OPERATOR	<u>1972 TO 1977</u>
	%
JUNIOR	77.5
SENIOR	70.9

Source: - 1977 to 1982: Pay Research Bureau
- 1972 to 1977: 75% Universe, based on data from Wage Rate Survey,
Department of Labour.

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

DATA PROCESSOR (CONVERSION)	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
LEVEL 1	96.9	87.7	86.6	87.0	85.2	*
LEVEL 2	95.1	95.3	95.5	92.1	97.3	99.3
LEVEL 3	87.2	89.8	84.5	89.3	91.3	94.7
LEVEL 5	95.9	90.6	86.8	91.5	95.9	96.8
<u>QUEBEC</u>						
LEVEL 1	96.3	100.0	101.3	97.3	100.1	95.5
LEVEL 2	96.8	97.1	97.1	97.5	98.8	98.9
LEVEL 3	95.3	97.9	99.2	98.7	99.3	96.3
LEVEL 5	92.2	93.3	102.8	105.5	104.6	104.4
<u>ONTARIO</u>						
LEVEL 1	104.4	104.6	100.0	102.6	100.4	99.4
LEVEL 2	100.6	102.3	103.0	102.7	100.9	99.1
LEVEL 3	101.8	104.2	102.4	101.5	100.6	99.4
LEVEL 5	106.0	104.8	104.0	103.2	102.1	101.5
<u>PRAIRIES</u>						
LEVEL 1	92.0	93.1	97.0	95.8	95.0	98.7
LEVEL 2	96.6	93.9	94.1	96.2	96.1	100.0
LEVEL 3	96.8	88.7	94.3	96.1	98.4	102.7
LEVEL 5	101.6	99.9	86.7	86.6	89.0	84.2
<u>BRITISH COLUMBIA</u>						
LEVEL 1	106.6	106.3	114.5	113.1	123.8	122.4
LEVEL 2	110.5	108.8	104.7	102.7	105.7	105.9
LEVEL 3	113.9	109.7	108.6	107.6	106.8	112.1
LEVEL 5	108.5	111.9	101.7	103.7	102.3	103.1

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

DATA PROCESSOR (CONVERSION)	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
LEVEL 1	101.8	107.9	125.0	123.3	135.7	115.2
LEVEL 2	108.0	106.7	109.7	108.8	111.6	113.4
LEVEL 3	104.8	98.3	104.5	105.9	109.1	113.5
LEVEL 5	110.8	117.4	*	110.5	116.7	*
<u>MANUFACTURING</u>						
LEVEL 1	99.9	106.4	112.2	109.8	106.3	109.6
LEVEL 2	103.7	108.8	109.1	111.1	109.8	106.9
LEVEL 3	98.6	103.6	103.1	107.8	108.7	107.9
LEVEL 5	110.9	111.7	106.5	113.1	105.3	104.4
<u>TRANSPORTATION & COMMUNICATION</u>						
LEVEL 1	101.8	93.1	94.6	94.9	97.2	101.2
LEVEL 2	99.8	96.4	97.7	96.3	99.0	102.3
LEVEL 3	98.2	97.2	96.9	97.2	97.5	94.7
LEVEL 5	127.1	125.1	107.4	109.1	111.0	113.2
<u>PUBLIC UTILITIES</u>						
LEVEL 1	127.6	90.0	*	87.9	*	*
LEVEL 2	102.1	106.2	102.3	102.2	100.6	102.0
LEVEL 3	107.4	113.9	108.8	107.6	106.1	108.0
LEVEL 5	111.4	121.9	113.3	113.3	109.5	114.5
<u>TRADE</u>						
LEVEL 1	101.9	97.7	65.4	94.0	*	*
LEVEL 2	107.1	91.5	90.4	91.9	91.0	89.0
LEVEL 3	125.0	102.5	101.4	88.8	103.7	111.9
LEVEL 5	-	99.9	*	*	*	*
<u>FINANCE & INSURANCE</u>						
LEVEL 1	95.0	97.5	98.9	98.7	97.1	93.5
LEVEL 2	96.1	91.9	92.9	92.6	92.7	93.0
LEVEL 3	99.5	91.8	94.1	92.0	90.4	93.7
LEVEL 5	87.8	91.8	88.8	88.5	89.2	79.9
<u>SERVICE</u>						
LEVEL 1	102.6	108.0	99.6	94.0	93.4	96.5
LEVEL 2	93.4	94.7	95.3	91.5	93.3	94.4
LEVEL 3	96.9	101.6	98.2	97.9	95.2	101.9
LEVEL 5	88.9	90.0	87.2	82.3	89.2	86.5

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

DATA PROCESSOR (CONVERSION)	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 1	40.8	40.1	39.5	40.6	40.7	42.3
LEVEL 2	46.3	46.9	47.5	47.9	46.5	46.9
LEVEL 3	52.7	53.4	54.1	53.8	53.3	52.6
LEVEL 5	65.8	65.2	73.8	73.4	71.9	72.6
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

DATA PROCESSOR (PRODUCTION)	1977 NO.OF % OF OBS. TOTAL	1978 NO.OF % OF OBS. TOTAL	1979 NO.OF % OF OBS. TOTAL	1980 NO.OF % OF OBS. TOTAL	1981 NO.OF % OF OBS. TOTAL	1982 NO.OF % OF OBS. TOTAL
LEVEL 2	681 23.8	666 24.0	604 21.1	660 21.9	684 23.8	767 22.6
LEVEL 3	812 28.4	752 27.1	842 29.4	927 30.8	875 30.5	1079 31.8
LEVEL 4	920 32.2	915 33.0	958 33.4	956 31.8	845 29.4	1058 31.2
LEVEL 5	388 13.6	380 13.7	391 13.7	370 12.3	361 12.6	381 11.2
LEVEL 7	59 2.0	61 2.2	70 2.4	95 3.2	105 3.7	107 3.2
TOTAL	2860 100.0	2774 100.0	2865 100.0	3008 100.0	2870 100.0	3392 100.0

Source: Pay Research Bureau

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

DATA PROCESSOR (PRODUCTION)	1977 MEAN \$	1978		1979		1980		1981		1982	
		MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%
LEVEL 2	10810	11414	5.6	12735	11.6	14047	10.3	15623	11.2	17422	11.5
LEVEL 3	12667	13101	3.4	14504	10.7	16181	11.6	18017	11.3	20412	13.3
LEVEL 4	14721	15626	6.1	16971	8.6	18922	11.5	21067	11.3	23536	11.7
LEVEL 5	17210	19281	12.0	21092	9.4	23377	10.8	25549	9.3	28780	12.6
LEVEL 7	24814	26232	5.7	27732	5.7	31228	12.6	34399	10.2	38567	12.1
	Q-3 \$	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
LEVEL 2	11911	12300	3.3	13860	12.7	15312	10.5	17088	11.6	19440	13.8
LEVEL 3	14208	14403	1.4	15631	8.5	17736	13.5	19747	11.3	22100	11.9
LEVEL 4	15778	17148	8.7	18589	8.4	20756	11.7	23397	12.7	25404	8.6
LEVEL 5	19687	21763	10.5	23500	8.0	26600	13.2	28818	8.3	31968	10.9
LEVEL 7	26844	27663	3.1	29741	7.5	33150	11.5	37256	12.4	42996	15.4

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1977 TO 1982

DATA PROCESSOR (PRODUCTION)	FIVE YEAR PERIOD
	PERCENTAGE INCREASE
	<u>1977 TO 1982</u> %
LEVEL 2	61.2
LEVEL 3	61.1
LEVEL 4	59.9
LEVEL 5	67.2
LEVEL 7	55.4

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

DATA PROCESSOR (PRODUCTION)	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
LEVEL 2	95.8	90.4	96.5	94.7	86.8	89.7
LEVEL 3	87.8	91.9	89.4	89.4	89.4	95.0
LEVEL 4	86.9	87.9	87.2	88.7	87.5	88.9
LEVEL 5	84.2	79.4	81.5	85.3	90.2	87.5
LEVEL 7	*	89.1	89.1	82.2	88.8	84.3
<u>QUEBEC</u>						
LEVEL 2	95.4	95.7	101.8	102.1	102.6	105.0
LEVEL 3	95.5	100.0	99.3	101.4	99.1	99.0
LEVEL 4	96.7	98.6	99.8	98.6	97.5	98.1
LEVEL 5	107.0	101.6	103.5	100.3	99.3	100.2
LEVEL 7	100.2	102.1	100.4	99.6	106.2	104.2
<u>ONTARIO</u>						
LEVEL 2	103.2	98.7	98.6	98.2	96.5	95.6
LEVEL 3	103.9	100.6	99.4	98.8	98.7	98.1
LEVEL 4	103.8	101.3	100.8	102.6	102.5	100.6
LEVEL 5	99.1	102.3	101.3	101.0	102.3	98.0
LEVEL 7	100.1	100.2	100.7	101.9	102.2	101.3
<u>PRAIRIES</u>						
LEVEL 2	91.6	95.9	95.4	96.5	99.6	100.4
LEVEL 3	88.4	91.4	95.9	91.8	96.4	97.2
LEVEL 4	93.6	95.9	95.8	94.2	93.4	96.0
LEVEL 5	93.0	93.3	93.5	95.2	92.9	101.9
LEVEL 7	102.7	*	*	96.2	82.6	89.7
<u>BRITISH COLUMBIA</u>						
LEVEL 2	107.0	125.2	113.8	116.6	118.6	120.0
LEVEL 3	112.6	112.2	115.3	118.6	118.1	117.8
LEVEL 4	102.1	107.3	108.3	108.7	110.8	111.7
LEVEL 5	106.1	106.1	104.1	110.5	113.2	108.3
LEVEL 7	*	*	104.6	110.5	104.2	109.0

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

DATA PROCESSOR (PRODUCTION)	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
LEVEL 2	102.5	117.9	113.7	107.9	108.1	113.9
LEVEL 3	97.9	97.9	102.7	94.3	99.3	98.3
LEVEL 4	104.8	103.8	103.3	94.4	101.8	100.9
LEVEL 5	105.5	101.4	105.1	102.8	93.0	105.5
LEVEL 7	*	*	*	99.3	93.2	99.5
<u>MANUFACTURING</u>						
LEVEL 2	96.7	100.6	102.3	106.1	107.2	105.1
LEVEL 3	99.5	102.8	104.6	104.9	105.8	103.3
LEVEL 4	99.0	103.0	104.7	105.0	105.4	102.9
LEVEL 5	101.5	101.6	103.9	107.0	104.3	100.2
LEVEL 7	103.0	102.0	98.3	101.7	111.3	105.6
<u>TRANSPORTATION & COMMUNICATION</u>						
LEVEL 2	95.4	103.7	102.4	97.0	100.4	104.2
LEVEL 3	99.6	100.7	102.0	101.5	104.8	107.8
LEVEL 4	102.9	99.9	101.1	100.1	101.1	104.4
LEVEL 5	112.3	107.8	106.0	103.6	106.5	111.1
LEVEL 7	97.4	96.9	97.7	98.9	95.4	96.9
<u>PUBLIC UTILITIES</u>						
LEVEL 2	129.1	116.4	116.6	121.3	110.0	113.7
LEVEL 3	127.1	111.7	105.7	105.7	100.3	102.9
LEVEL 4	126.2	108.6	106.9	109.7	106.4	113.0
LEVEL 5	117.2	113.9	112.6	112.2	112.3	117.7
LEVEL 7	*	*	112.0	111.4	*	*

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

DATA PROCESSOR (PRODUCTION)	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>TRADE</u>						
LEVEL 2	106.1	96.0	*	*	115.8	*
LEVEL 3	86.8	93.3	96.2	97.5	92.8	92.3
LEVEL 4	85.9	94.0	92.1	91.1	86.8	89.1
LEVEL 5	83.3	91.5	*	*	91.4	110.9
LEVEL 7	*	*	*	*	*	*
<u>FINANCE & INSURANCE</u>						
LEVEL 2	90.0	94.3	94.1	97.1	98.3	100.8
LEVEL 3	90.0	95.2	94.4	94.5	93.2	92.0
LEVEL 4	90.1	93.7	92.4	93.4	83.1	93.7
LEVEL 5	91.8	90.3	89.8	89.0	90.5	90.3
LEVEL 7	97.0	96.9	98.1	83.2	101.6	102.3
<u>SERVICE</u>						
LEVEL 2	94.0	98.1	92.7	94.5	91.6	89.2
LEVEL 3	89.0	98.3	95.5	95.7	95.2	94.2
LEVEL 4	96.7	98.8	97.2	98.4	96.4	95.0
LEVEL 5	99.8	94.0	92.8	94.3	95.6	93.9
LEVEL 7	100.7	105.1	100.2	98.4	97.8	98.0

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

DATA PROCESSOR (PRODUCTION)	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 2	48.7	48.3	49.2	49.1	48.0	47.8
LEVEL 3	57.1	55.4	56.0	56.6	55.4	56.0
LEVEL 4	66.3	66.1	65.6	66.2	64.8	64.5
LEVEL 5	77.5	81.5	81.5	81.2	78.5	78.9
LEVEL 7	111.8	110.9	107.2	109.3	105.7	105.8
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

TYPIST, STENOGRAPHER AND SECRETARY	1977 NO. OF % OF OBS. TOTAL	1978 NO. OF % OF OBS. TOTAL	1979 NO. OF % OF OBS. TOTAL	1980 NO. OF % OF OBS. TOTAL	1981 NO. OF % OF OBS. TOTAL	1982 NO. OF % OF OBS. TOTAL
LEVEL TYP 1	3523 47.5	3482 67.1	3401 43.7	3282 44.9	2545 32.5	2496 30.7
LEVEL TYP 2	3887 52.5	4510 32.9	4385 56.3	4024 55.1	5284 67.5	5638 69.3
TOTAL	7410 100.0	7992 100.0	7786 100.0	7306 100.0	7829 100.0	8134 100.0
LEVEL STN 1	1590 25.4	1793 27.3	1659 25.8	1377 23.5	1217 28.4	1087 29.9
LEVEL STN 2	4670 74.6	4768 72.7	4769 74.2	4477 76.5	3067 71.6	2554 70.1
TOTAL	6260 100.0	6561 100.0	6428 100.0	5854 100.0	4284 100.0	3641 100.0
LEVEL SCY 2	5742 67.1	5671 65.7	5894 66.1	5416 65.4	6897 67.2	7425 65.3
LEVEL SCY 3	2811 32.9	2965 34.3	3026 33.9	2860 34.6	3369 32.8	3947 34.7
TOTAL	8553 100.0	8636 100.0	8920 100.0	8276 100.0	10266 100.0	11372 100.0

Source: Pay Research Bureau

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

TYPIST, STENOGRAPHER AND SECRETARY	1977	1978		1979		1980		1981		1982	
	MEAN	MEAN		MEAN		MEAN		MEAN		MEAN	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL TYP 1	8234	8906	8.2	9924	11.4	11140	12.3	12226	9.7	14135	15.6
LEVEL TYP 2	9275	10077	8.6	11024	9.4	12340	11.9	13643	10.6	15717	15.2
	Q-3	Q-3		Q-3		Q-3		Q-3		Q-3	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL TYP 1	8700	9400	8.0	10583	12.6	11725	10.8	12970	10.6	15245	17.5
LEVEL TYP 2	9959	10891	9.4	11900	9.3	13419	12.8	14556	8.5	16955	16.5
	MEAN	MEAN		MEAN		MEAN		MEAN		MEAN	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL STN 1	9494	10100	6.4	11430	13.2	12593	10.2	14135	12.2	16263	15.1
LEVEL STN 2	9990	10847	8.6	11885	9.6	13305	11.9	15494	16.5	17879	15.4
	Q-3	Q-3		Q-3		Q-3		Q-3		Q-3	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL STN 1	10660	11233	5.4	13016	15.9	14855	14.1	16737	12.7	18518	10.6
LEVEL STN 2	10948	12060	10.2	12972	7.6	14400	11.0	16893	17.3	19692	16.6
	MEAN	MEAN		MEAN		MEAN		MEAN		MEAN	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL SCY 2	10782	12027	11.5	13423	11.6	14971	11.5	16814	12.3	19059	13.4
LEVEL SCY 3	12489	13679	9.5	15086	10.3	16977	12.5	19132	12.7	21643	13.1
	Q-3	Q-3		Q-3		Q-3		Q-3		Q-3	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL SCY 2	11750	13250	12.8	14800	11.7	16551	11.8	18504	11.8	20900	12.9
LEVEL SCY 3	13350	14991	12.3	16650	11.1	18500	11.1	21000	13.5	23800	13.3

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

TYPIST, STENOGRAPHER AND SECRETARY	FIVE YEAR PERIOD PERCENTAGE INCREASE <u>1977 TO 1982</u> %
LEVEL TYP 1	71.7
LEVEL TYP 2	69.5
LEVEL STN 1	71.3
LEVEL STN 2	79.0
LEVEL SCY 2	76.8
LEVEL SCY 3	73.3
	<u>1972 TO 1977</u> %
STENOGRAPHER	
JUNIOR	76.3
SENIOR	71.2
TYPIST	
JUNIOR	81.9
SENIOR	74.3

Source: - 1977 to 1982: Pay Research Bureau
- 1972 to 1977: 75% Universe, based on data from Wage Rate Survey,
Department of Labour.

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

TYPIST, STENOGRAPHER AND SECRETARY	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
LEVEL TYP 1	91.6	91.3	87.3	84.1	85.2	83.6
LEVEL TYP 2	88.5	88.0	85.8	85.7	88.7	88.1
LEVEL STN 1	90.3	92.7	90.8	90.6	95.1	95.7
LEVEL STN 2	86.6	88.1	86.7	87.2	85.5	85.1
LEVEL SCY 2	90.3	90.6	88.1	87.1	85.4	88.6
LEVEL SCY 3	91.0	85.0	84.2	82.7	81.8	80.5
<u>QUEBEC</u>						
LEVEL TYP 1	99.5	96.8	96.1	95.3	97.1	95.8
LEVEL TYP 2	98.1	98.4	97.3	100.2	100.3	97.7
LEVEL STN 1	101.7	98.2	101.3	102.0	97.9	95.9
LEVEL STN 2	100.7	99.7	98.8	99.8	100.6	98.2
LEVEL SCY 2	100.3	103.0	102.0	100.7	103.6	102.4
LEVEL SCY 3	98.5	100.1	100.4	99.0	100.8	99.8
<u>ONTARIO</u>						
LEVEL TYP 1	99.4	101.9	102.6	105.2	104.7	103.2
LEVEL TYP 2	101.0	102.4	102.3	100.2	100.4	99.9
LEVEL STN 1	100.8	103.5	100.7	102.8	105.3	104.0
LEVEL STN 2	100.5	101.9	101.7	101.0	101.0	100.9
LEVEL SCY 2	99.2	100.0	99.8	100.2	97.5	97.1
LEVEL SCY 3	100.3	100.7	100.6	100.8	98.5	98.7

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

TYPIST, STENOGRAPHER AND SECRETARY	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>PRAIRIES</u>						
LEVEL TYP 1	98.2	97.2	98.5	97.1	94.2	98.7
LEVEL TYP 2	99.8	98.9	101.9	98.4	99.1	101.7
LEVEL STN 1	98.1	97.1	98.4	95.1	94.9	97.4
LEVEL STN 2	95.8	95.2	97.3	97.5	100.4	99.1
LEVEL SCY 2	99.2	95.0	97.5	99.6	100.8	102.1
LEVEL SCY 3	100.7	98.9	99.1	103.2	105.8	106.7
<u>BRITISH COLUMBIA</u>						
LEVEL TYP 1	107.4	108.8	106.9	104.4	105.6	106.3
LEVEL TYP 2	106.2	104.8	104.0	101.5	105.4	107.8
LEVEL STN 1	104.7	106.5	105.3	111.2	118.7	116.9
LEVEL STN 2	105.4	107.0	107.6	108.1	105.1	108.2
LEVEL SCY 2	110.6	107.1	106.4	104.8	106.4	107.1
LEVEL SCY 3	106.8	104.2	106.1	104.7	105.6	103.3

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

TYPIST, STENOGRAPHER AND SECRETARY	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
LEVEL TYP 1	133.0	116.5	121.1	122.0	124.9	124.9
LEVEL TYP 2	106.3	108.6	105.3	112.0	114.6	113.2
LEVEL STN 1	106.3	101.5	110.5	104.8	100.7	102.5
LEVEL STN 2	116.8	114.3	119.0	117.5	115.0	108.1
LEVEL SCY 2	112.5	109.2	109.4	109.0	109.6	110.9
LEVEL SCY 3	106.9	103.8	103.4	106.1	107.7	107.6
<u>MANUFACTURING</u>						
LEVEL TYP 1	103.8	109.5	108.0	115.2	107.9	97.7
LEVEL TYP 2	106.8	108.1	106.2	107.6	103.3	100.5
LEVEL STN 1	100.9	104.2	101.2	100.8	106.2	105.0
LEVEL STN 2	109.6	108.5	107.8	108.9	105.2	106.0
LEVEL SCY 2	109.0	107.5	104.6	105.6	104.2	101.7
LEVEL SCY 3	101.6	104.1	104.6	105.7	105.3	102.5
<u>TRANSPORTATION & COMMUNICATION</u>						
LEVEL TYP 1	106.0	106.3	104.0	99.3	99.3	103.0
LEVEL TYP 2	92.2	95.6	95.0	92.9	97.1	96.8
LEVEL STN 1	117.1	109.7	109.2	109.2	105.5	108.3
LEVEL STN 2	102.1	101.6	98.4	100.7	96.2	97.1
LEVEL SCY 2	89.0	109.2	107.6	103.6	104.7	104.8
LEVEL SCY 3	102.4	102.1	100.2	100.5	100.3	101.9
<u>PUBLIC UTILITIES</u>						
LEVEL TYP 1	98.0	109.8	111.7	112.3	116.0	113.8
LEVEL TYP 2	106.4	108.9	106.7	109.9	108.4	106.1
LEVEL STN 1	104.9	103.3	102.8	100.2	100.7	102.2
LEVEL STN 2	113.4	113.2	106.8	110.2	101.7	104.6
LEVEL SCY 2	118.6	112.3	108.2	103.9	109.7	111.5
LEVEL SCY 3	118.1	115.3	109.7	107.1	108.6	110.8

Source: Pay Research Bureau

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

TYPIST, STENOGRAPHER AND SECRETARY	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>TRADE</u>						
LEVEL TYP 1	105.2	101.5	96.5	103.0	104.4	92.5
LEVEL TYP 2	106.0	99.8	93.1	98.2	95.1	86.4
LEVEL STN 1	*	*	*	*	*	*
LEVEL STN 2	*	*	*	*	-	*
LEVEL SCY 2	96.4	94.0	95.0	94.9	94.9	92.1
LEVEL SCY 3	91.7	97.9	98.7	96.1	89.6	86.1
<u>FINANCE & INSURANCE</u>						
LEVEL TYP 1	97.7	97.6	97.0	95.6	97.5	97.4
LEVEL TYP 2	96.0	96.0	96.1	95.1	98.4	99.2
LEVEL STN 1	86.4	88.1	85.3	87.4	86.3	90.5
LEVEL STN 2	91.5	91.9	94.5	94.6	96.2	91.4
LEVEL SCY 2	97.4	94.1	95.7	95.7	94.7	95.8
LEVEL SCY 3	97.5	96.7	97.7	98.6	97.2	98.3
<u>SERVICE</u>						
LEVEL TYP 1	103.3	99.2	100.5	97.0	92.3	97.2
LEVEL TYP 2	101.4	96.0	100.6	97.6	96.6	99.1
LEVEL STN 1	94.0	92.6	96.6	87.0	88.6	87.6
LEVEL STN 2	93.0	96.0	96.1	91.3	90.7	91.2
LEVEL SCY 2	96.0	89.4	91.2	95.7	90.6	91.8
LEVEL SCY 3	93.7	88.8	90.3	88.9	88.1	90.7

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

TYPIST, STENOGRAPHER AND SECRETARY	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL TYP 1	37.1	37.7	38.3	39.0	37.6	38.8
LEVEL TYP 2	41.8	42.6	42.6	43.2	41.9	43.1
LEVEL STN 1	42.8	42.7	44.2	44.1	43.4	44.6
LEVEL STN 2	45.0	45.9	45.9	46.6	47.6	49.0
LEVEL SCY 2	48.6	50.9	51.9	52.4	51.7	52.3
LEVEL SCY 3	56.3	57.8	58.3	59.4	58.8	59.4
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

SECTION 4

TECHNICAL CLASSES

Technical Classes

In analysing the data presented in this section, users should be aware of the following factors:

- i) In 1979, the July 1st surveys for Electronics Technician and Technologist and Technical Support were replaced by the Bureau's Automated Pay Survey Program in which the effective date is August 15th.
- ii) A special review of the Electronics Technician and Technologist class in 1982 identified matches in several organizations which were not previously reported but are included in the 1982 data. In view of these changes, no trend data have been provided for 1982.
- iii) New survey specifications for the Technical Support (Engineering and Scientific) were developed and used for the first time in 1978. These specifications replaced those for Technician, Engineering; Technician, Laboratory; Technologist, Engineering; and Technologist, Scientific which had been used by the Bureau up to 1977. Consequently, no trend data have been provided for 1977.

Trends in Survey Coverage

<u>CLASS</u>	Percentage Increases (Decreases)	
	No. of	No. of
	Orgs. <u>%</u>	Empls. <u>%</u>
DRAFTSMAN (1977 - 1982)	(3.4)	4.7
ELECTRONICS TECHNICIAN & TECHNOLOGIST (1977 - 1981)	(4.8)	29.1
TECHNICAL SUPPORT (ENGINEERING & SCIENTIFIC) (1978 - 1982)	4.3	23.8

TABLE I
SURVEY COVERAGE BY CLASS - CANADA
1977 TO 1982

TECHNICAL CLASSES	1977		1978		1979		1980		1981		1982	
	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.
DRAFTSMAN	145	5506	146	5452	140	5131	140	5332	141	5617	140	5764
ELECTRONICS TECHNICIAN & TECHNOLOGIST	62	8334	64	9261	57	11193	58	11381	59	10757	-	-
TECHNICAL SUPPORT (ENGINEERING & SCIENTIFIC)	-	-	115	10665	111	11435	118	11754	120	13013	120	13200

TABLE 2
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR REGIONS
1977 TO 1982

TECHNICAL CLASSES	ATLANTIC PROVINCES						QUEBEC					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
DRAFTSMAN	4.0	4.6	3.4	5.0	4.6	3.8	31.1	30.1	27.7	29.5	29.4	27.8
ELECTRONICS TECHNICIAN AND TECHNOLOGIST	15.5	15.4	11.2	13.4	13.3	-	28.9	25.8	29.9	30.5	32.7	-
TECHNICAL SUPPORT (ENGIN. & SCIENT.)	-	3.9	4.0	5.6	4.6	3.7	-	24.7	28.4	30.1	30.1	28.3
	ONTARIO						PRAIRIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
DRAFTSMAN	38.7	36.5	38.7	37.4	38.2	39.7	15.8	17.4	18.4	17.4	16.8	18.6
ELECTRONICS TECHNICIAN AND TECHNOLOGIST	28.6	35.3	40.0	34.1	38.3	-	16.2	15.6	11.5	14.2	8.3	-
TECHNICAL SUPPORT (ENGIN. & SCIENT.)	-	36.6	36.1	33.2	33.8	34.5	-	27.8	25.0	26.1	26.4	28.2
	BRITISH COLUMBIA											
	1977	1978	1979	1980	1981	1982						
	%	%	%	%	%	%						
DRAFTSMAN	10.4	11.4	11.8	10.7	11.0	10.1						
ELECTRONICS TECHNICIAN AND TECHNOLOGIST	10.8	7.9	7.4	7.8	7.4	-						
TECHNICAL SUPPORT (ENGIN. & SCIENT.)	-	7.0	6.5	5.0	5.1	5.3						

TABLE 3
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR INDUSTRIES
1977 TO 1982

TECHNICAL CLASSES	MINING						MANUFACTURING					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
DRAFTSMAN	6.3	6.3	5.0	5.7	6.2	6.5	31.1	28.2	28.3	28.0	27.0	24.3
ELECTRONICS TECHNICIAN												
AND TECHNOLOGIST	-	0.1	0.1	0.1	0.1	-	20.7	17.6	14.7	16.1	18.4	-
TECHNICAL SUPPORT												
(ENGIN. & SCIENT.)	-	7.0	8.5	7.9	8.3	8.3	-	43.4	41.6	46.7	44.5	44.4
	TRANSPORTATION AND COMMUNICATION						PUBLIC UTILITIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
DRAFTSMAN	9.2	8.0	8.3	6.6	8.2	8.9	18.5	23.3	24.4	23.9	26.1	26.3
ELECTRONICS TECHNICIAN												
AND TECHNOLOGIST	60.6	59.2	62.5	69.0	65.6	-	11.1	18.4	16.8	9.8	11.8	-
TECHNICAL SUPPORT												
(ENGIN. & SCIENT.)	-	11.7	9.4	10.0	8.6	8.5	-	20.5	19.6	16.3	19.1	17.0
	TRADE						FINANCE AND INSURANCE					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
DRAFTSMAN	0.2	0.4	0.4	0.4	0.7	0.8	0.7	0.8	0.6	0.5	0.6	0.6
ELECTRONICS TECHNICIAN												
AND TECHNOLOGIST	4.7	1.0	0.8	0.1	0.6	-	-	-	-	-	-	-
TECHNICAL SUPPORT												
(ENGIN. & SCIENT.)	-	-	-	-	-	-	-	-	-	-	-	-
	SERVICE											
	1977	1978	1979	1980	1981	1982						
	%	%	%	%	%	%						
DRAFTSMAN	34.0	33.0	33.0	34.9	31.2	32.6						
ELECTRONICS TECHNICIAN												
AND TECHNOLOGIST	2.9	3.7	5.1	4.9	3.5	-						
TECHNICAL SUPPORT												
(ENGIN. & SCIENT.)	-	17.4	20.9	19.1	19.5	21.8						

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1982

DRAFTSMAN	1977		1978		1979		1980		1981		1982	
	NO.OF	% OF	NO.OF	% OF	NO.OF	% OF	NO.OF	% OF	NO.OF	% OF	NO.OF	% OF
	OBS.	TOTAL	OBS.	TOTAL	OBS.	TOTAL	OBS.	TOTAL	OBS.	TOTAL	OBS.	TOTAL
LEVEL 1	276	5.0	338	6.2	299	5.8	379	7.1	459	8.2	355	6.2
LEVEL 2	713	13.0	748	13.7	626	12.2	684	12.8	798	14.2	812	14.1
LEVEL 3	1453	26.4	1525	28.0	1359	26.5	1422	26.7	1294	23.0	1424	24.7
LEVEL 4	2079	37.8	1961	36.0	1998	38.9	2006	37.6	2125	37.8	2180	37.8
LEVEL 5	661	12.0	627	11.5	600	11.7	593	11.1	689	12.3	712	12.3
LEVEL 6	239	4.3	171	3.1	169	3.3	143	2.7	149	2.7	166	2.9
LEVEL 7	85	1.5	82	1.5	80	1.6	105	2.0	103	1.8	115	2.0
TOTAL	5506	100.0	5452	100.0	5131	100.0	5332	100.0	5617	100.0	5764	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

DRAFTSMAN	1977		1978		1979		1980		1981		1982	
	MEAN		MEAN	%	MEAN	%	MEAN	%	MEAN	%	MEAN	%
	\$		\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL 1	10882		11935	9.7	12652	6.0	14013	10.8	15694	12.0	17313	10.3
LEVEL 2	11705		13255	13.2	14031	5.9	15561	10.9	18117	16.4	20562	13.5
LEVEL 3	14487		16153	11.5	17154	6.2	19164	11.7	21189	10.6	23844	12.5
LEVEL 4	16999		18355	8.0	19695	7.3	22026	11.8	24693	12.1	27899	13.0
LEVEL 5	19648		10694	5.3	22710	9.7	25269	11.3	28259	11.8	32249	10.2
LEVEL 6	20538		22559	9.8	24333	7.9	27074	11.3	30884	14.1	35063	13.5
LEVEL 7	21694		26760	23.4	28368	6.0	30964	9.2	35998	16.3	40649	12.9
	Q-3		Q-3	%	Q-3	%	Q-3	%	Q-3	%	Q-3	%
	\$		\$	%	\$	%	\$	%	\$	%	\$	%
LEVEL 1	12295		13484	9.7	14011	3.9	15744	12.4	16872	7.2	18876	11.9
LEVEL 2	12924		14905	15.3	15535	4.2	17149	10.4	19915	16.1	23203	16.5
LEVEL 3	15990		17854	11.7	18600	4.2	20953	12.7	22935	9.5	26594	16.0
LEVEL 4	18603		19796	6.4	21362	7.9	24000	12.3	27231	13.5	30600	12.4
LEVEL 5	20866		22200	6.4	24050	8.3	26885	11.8	30400	13.1	33415	9.9
LEVEL 6	22404		24120	7.7	26124	8.3	29244	11.9	33060	13.0	37455	13.3
LEVEL 7	24000		30451	26.9	31957	4.9	34942	9.3	39208	12.2	44880	14.5

% represents percentage Increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

DRAFTSMAN	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	<u>1972 TO 1977</u>	<u>1977 TO 1982</u>	<u>1972 TO 1982</u>
	%	%	%
LEVEL 1	75.9	59.1	179.8
LEVEL 2	44.9	75.7	154.5
LEVEL 3	61.7	64.6	166.1
LEVEL 4	62.8	64.1	167.1
LEVEL 5	68.7	64.1	167.9
LEVEL 6	68.8	70.7	188.1
LEVEL 7	59.3	87.4	198.5

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

DRAFTSMAN	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>						
LEVEL 1	99.1	90.1	82.7	84.7	81.8	88.4
LEVEL 2	87.5	83.1	86.5	89.7	88.6	90.6
LEVEL 3	83.7	90.6	88.7	90.6	90.3	91.5
LEVEL 4	87.5	86.4	85.3	84.0	82.2	85.0
LEVEL 5	92.8	92.1	85.6	87.1	90.0	94.6
LEVEL 6	-	*	*	*	*	*
LEVEL 7	*	*	*	*	*	*
<u>QUEBEC</u>						
LEVEL 1	93.9	95.7	97.9	98.7	96.9	97.0
LEVEL 2	98.0	95.2	94.1	99.0	97.6	97.3
LEVEL 3	94.6	96.9	94.8	93.0	94.2	92.0
LEVEL 4	93.5	95.2	95.0	96.0	95.3	93.4
LEVEL 5	95.8	96.0	97.1	94.8	98.9	99.8
LEVEL 6	94.8	96.2	95.3	96.3	94.9	95.4
LEVEL 7	94.2	88.5	*	90.2	94.6	89.6
<u>ONTARIO</u>						
LEVEL 1	109.2	105.0	106.1	106.1	101.6	105.2
LEVEL 2	100.4	104.1	106.3	106.8	100.9	99.0
LEVEL 3	104.3	101.3	102.8	104.7	104.1	103.4
LEVEL 4	106.4	105.0	104.5	103.4	103.0	103.1
LEVEL 5	104.2	102.7	102.1	102.0	100.7	101.7
LEVEL 6	107.9	98.5	101.7	98.0	98.7	101.0
LEVEL 7	111.6	108.4	86.1	108.2	104.8	102.7
<u>PRAIRIES</u>						
LEVEL 1	91.5	94.5	90.3	94.9	96.5	96.9
LEVEL 2	104.0	100.7	96.7	97.4	95.3	92.2
LEVEL 3	100.4	98.8	98.7	97.7	99.2	101.1
LEVEL 4	98.1	97.8	99.1	99.0	103.9	105.0
LEVEL 5	98.5	98.8	98.2	99.2	102.0	99.6
LEVEL 6	103.0	99.7	98.5	102.7	107.8	100.6
LEVEL 7	107.7	94.3	82.9	94.4	98.4	101.8
<u>BRITISH COLUMBIA</u>						
LEVEL 1	98.0	116.1	109.3	107.5	108.2	106.3
LEVEL 2	102.1	109.5	103.2	100.3	110.3	114.7
LEVEL 3	100.4	106.8	106.0	106.8	107.4	108.7
LEVEL 4	103.5	107.4	105.8	112.0	107.7	109.7
LEVEL 5	98.9	100.3	101.8	109.0	95.5	91.7
LEVEL 6	109.1	110.4	110.3	110.6	104.5	105.7
LEVEL 7	98.0	*	*	*	*	98.9

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

DRAFTSMAN	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>						
LEVEL 1	130.8	116.2	120.7	114.9	114.1	109.5
LEVEL 2	102.0	86.3	100.5	103.1	101.3	102.7
LEVEL 3	104.8	98.3	102.9	101.3	103.2	99.4
LEVEL 4	101.2	102.1	107.0	103.2	104.9	103.3
LEVEL 5	100.9	100.1	105.8	102.2	111.1	115.0
LEVEL 6	105.1	102.0	97.9	106.7	116.3	109.5
LEVEL 7	98.7	91.0	91.8	94.5	92.5	96.0
<u>MANUFACTURING</u>						
LEVEL 1	93.4	97.6	97.5	98.4	98.2	99.2
LEVEL 2	105.2	103.6	102.6	105.1	103.4	100.2
LEVEL 3	102.5	100.0	100.8	101.0	101.3	100.0
LEVEL 4	100.6	99.9	100.4	98.4	98.4	97.2
LEVEL 5	96.9	97.3	98.4	98.1	98.3	98.1
LEVEL 6	95.6	98.9	100.0	99.1	97.8	100.3
LEVEL 7	98.3	92.5	96.5	96.2	98.2	93.5
<u>TRANSPORTATION & COMMUNICATION</u>						
LEVEL 1	103.4	79.4	80.9	79.3	*	*
LEVEL 2	97.2	85.8	94.0	85.6	86.7	87.6
LEVEL 3	98.9	96.0	99.7	89.1	87.7	89.0
LEVEL 4	99.9	100.3	100.1	88.9	94.1	93.4
LEVEL 5	97.7	99.4	96.7	*	95.8	97.0
LEVEL 6	114.2	105.7	108.8	106.3	104.0	105.4
LEVEL 7	*	*	-	-	-	-
<u>PUBLIC UTILITIES</u>						
LEVEL 1	96.2	105.0	108.2	107.0	102.8	103.7
LEVEL 2	98.7	102.4	102.0	107.3	102.4	108.7
LEVEL 3	99.2	103.1	102.4	105.7	100.2	102.1
LEVEL 4	102.4	104.0	102.2	104.6	102.0	104.0
LEVEL 5	120.1	116.7	114.0	111.0	103.3	100.8
LEVEL 6	99.1	107.1	100.8	103.7	101.8	101.0
LEVEL 7	*	112.2	111.6	113.3	107.5	110.3

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

DRAFTSMAN	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
<u>TRADE</u>						
LEVEL 1	-	*	-	*	*	*
LEVEL 2	-	*	*	*	85.3	82.9
LEVEL 3	*	80.3	86.3	97.4	96.0	92.9
LEVEL 4	*	91.3	*	*	98.8	89.2
LEVEL 5	*	*	*	-	*	-
LEVEL 6	-	*	-	-	-	-
LEVEL 7	-	-	-	-	-	-
<u>FINANCE & INSURANCE</u>						
LEVEL 1	-	-	-	-	-	-
LEVEL 2	*	*	*	*	*	*
LEVEL 3	109.0	107.7	*	*	110.9	116.0
LEVEL 4	116.0	114.4	116.1	114.1	111.7	113.1
LEVEL 5	*	*	*	*	*	*
LEVEL 6	*	*	*	*	*	*
LEVEL 7	-	-	-	-	-	-
<u>SERVICE</u>						
LEVEL 1	102.0	93.9	90.6	89.9	96.0	93.6
LEVEL 2	97.6	101.3	98.2	97.5	99.8	96.3
LEVEL 3	97.6	99.7	97.1	97.8	101.6	102.4
LEVEL 4	97.3	96.2	97.0	98.7	100.1	99.5
LEVEL 5	97.0	95.5	94.8	96.6	99.2	99.8
LEVEL 6	100.2	91.5	93.9	92.7	90.7	89.4
LEVEL 7	106.4	88.5	86.1	88.4	92.6	95.3

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

DRAFTSMAN	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 1	49.0	50.5	48.9	49.0	48.2	47.5
LEVEL 2	52.7	56.1	54.2	54.4	55.7	56.4
LEVEL 3	65.3	68.3	66.3	67.1	65.1	65.4
LEVEL 4	76.6	77.6	76.1	77.1	75.9	76.5
LEVEL 5	88.5	87.5	87.8	88.4	86.9	85.4
LEVEL 6	92.5	95.4	94.0	94.7	95.0	96.2
LEVEL 7	97.7	113.2	109.6	108.3	110.6	111.5
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

TABLE 4
SURVEY COVERAGE BY CLASS AND LEVEL - CANADA
1977 TO 1981

ELECTRONICS TECHNICIAN & TECHNOLOGIST	1977		1978		1979		1980		1981	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
LEVEL 1	291	3.5	466	5.0	494	4.4	486	4.3	585	5.4
LEVEL 2	553	6.6	1142	12.3	1177	10.5	1129	9.9	891	8.3
LEVEL 3	3415	41.0	3427	37.0	4587	41.0	4446	39.1	4180	38.9
LEVEL 4	2810	33.7	2165	23.4	2488	22.2	3005	26.4	3074	28.6
LEVEL 5	935	11.2	1585	17.1	1923	17.2	1847	16.2	1563	14.5
LEVEL 6	238	2.9	304	3.3	390	3.5	280	2.5	288	2.7
LEVEL 7	92	1.1	172	1.9	134	1.2	188	1.6	176	1.6
TOTAL	8334	100.0	9261	100.0	11193	100.0	11381	100.0	10757	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATE OF PAY - CANADA
1977 TO 1981

ELECTRONICS TECHNICIAN AND TECHNOLOGIST	1977	1978		1979		1980		1981	
	MEAN \$	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%
LEVEL 1	11235	12186	8.5	12809	5.1	15697	22.5	17387	10.8
LEVEL 2	12757	14048	10.1	15273	8.7	17311	13.3	19380	12.0
LEVEL 3	15918	17468	9.7	18953	8.5	20929	10.4	22715	8.5
LEVEL 4	17340	17967	3.6	19393	7.9	21243	9.5	24163	13.7
LEVEL 5	19562	21660	10.7	23115	6.7	24998	8.1	28538	14.2
LEVEL 6	21458	23915	11.5	25729	7.6	27638	7.4	30444	10.2
LEVEL 7	24350	25349	4.1	29294	15.6	31199	6.5	34957	12.0
	Q-3 \$	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
LEVEL 1	12077	13307	10.2	13750	3.3	17113	24.5	18686	9.2
LEVEL 2	13739	15522	13.0	16936	9.1	19201	13.4	22165	15.4
LEVEL 3	17040	19592	15.0	20046	2.3	22027	9.9	24008	9.0
LEVEL 4	18681	20155	7.9	20788	3.1	22968	10.5	27611	20.2
LEVEL 5	21100	24245	14.9	25699	6.0	28300	10.1	32095	13.4
LEVEL 6	23425	26989	15.2	29491	9.3	29221	(0.9)	33462	14.5
LEVEL 7	25700	27200	5.8	31076	14.3	34009	9.4	37872	11.4

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1973 TO 1981

ELECTRONICS TECHNICIAN AND TECHNOLOGIST	FIVE YEAR PERIOD		TEN YEAR PERIOD
	PERCENTAGE INCREASE		PERCENTAGE INCREASE
	<u>1973 TO 1977</u>	<u>1977 TO 1981(a)</u>	<u>1973 TO 1981(a)</u>
	%	%	%
LEVEL 1	52.3	54.8	135.7
LEVEL 2	48.7	51.9	126.0
LEVEL 3	49.9	42.7	113.8
LEVEL 4	52.8	39.3	112.9
LEVEL 5	51.8	45.9	121.5
LEVEL 6	50.6	41.9	113.6
LEVEL 7	61.9	43.6	132.5

(a) A special review of Electronics Technician and Technologist class in 1982 identified new matches in several organizations. Because of these changes, no trend data are shown for 1982.

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1981

ELECTRONICS TECHNICIAN AND TECHNOLOGIST	1977 %	1978 %	1979 %	1980 %	1981 %
<u>ATLANTIC PROVINCES</u>					
LEVEL 1	101.5	104.0	100.0	86.1	89.8
LEVEL 2	100.1	98.0	91.1	91.5	96.4
LEVEL 3	94.3	89.9	86.1	85.3	91.6
LEVEL 4	94.4	94.0	96.3	93.0	98.8
LEVEL 5	97.0	91.3	90.2	92.1	91.8
LEVEL 6	104.1	89.4	91.8	101.2	106.5
LEVEL 7	97.4	92.8	95.6	92.4	95.4
<u>QUEBEC</u>					
LEVEL 1	94.6	95.6	96.0	99.6	99.6
LEVEL 2	97.5	98.2	99.4	102.8	104.0
LEVEL 3	99.1	96.9	98.2	100.3	101.8
LEVEL 4	102.5	101.9	99.1	104.0	96.3
LEVEL 5	101.2	99.4	100.5	105.7	103.1
LEVEL 6	99.2	96.8	97.2	101.3	105.6
LEVEL 7	102.3	109.0	103.4	107.4	108.0
<u>ONTARIO</u>					
LEVEL 1	96.6	97.0	99.2	101.2	100.7
LEVEL 2	96.6	100.5	102.7	102.1	101.1
LEVEL 3	98.2	99.8	100.0	99.1	100.9
LEVEL 4	99.2	95.2	97.0	93.6	99.9
LEVEL 5	101.6	105.6	104.0	100.7	103.2
LEVEL 6	94.3	104.3	105.0	93.8	97.1
LEVEL 7	99.5	99.3	95.5	96.6	91.2
<u>PRAIRIES</u>					
LEVEL 1	102.0	106.8	113.3	102.8	105.2
LEVEL 2	108.4	103.5	101.6	100.6	91.5
LEVEL 3	106.1	109.6	108.9	109.9	95.8
LEVEL 4	97.3	99.4	99.2	96.0	101.6
LEVEL 5	97.5	91.5	92.5	94.1	94.7
LEVEL 6	99.6	92.6	92.0	97.4	90.4
LEVEL 7	96.0	92.1	95.1	90.5	90.9
<u>BRITISH COLUMBIA</u>					
LEVEL 1	109.7	112.6	113.6	104.4	105.5
LEVEL 2	111.0	104.1	102.0	93.1	92.2
LEVEL 3	100.8	96.9	97.0	95.8	96.7
LEVEL 4	104.4	112.4	109.0	112.6	109.0
LEVEL 5	102.5	98.8	96.4	98.2	95.6
LEVEL 6	104.0	103.5	97.6	109.7	102.4
LEVEL 7	*	96.1	*	93.8	*

Source: Pay Research Bureau

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1981

ELECTRONICS TECHNICIAN AND TECHNOLOGIST	1977 %	1978 %	1979 %	1980 %	1981 %
<u>MINING</u>					
LEVEL 1	-	-	-	-	-
LEVEL 2	-	-	-	-	-
LEVEL 3	-	-	-	-	-
LEVEL 4	-	*	*	*	*
LEVEL 5	-	*	*	*	*
LEVEL 6	-	-	-	*	*
LEVEL 7	-	-	-	-	-
<u>MANUFACTURING</u>					
LEVEL 1	91.8	91.5	96.4	87.5	90.2
LEVEL 2	92.6	91.0	92.1	88.2	90.4
LEVEL 3	88.3	84.3	84.3	82.0	84.5
LEVEL 4	92.4	92.5	93.6	92.2	90.6
LEVEL 5	88.0	86.9	86.4	88.6	86.8
LEVEL 6	91.2	87.2	86.6	91.0	90.1
LEVEL 7	89.3	90.2	91.9	91.1	89.6
<u>TRANSPORTATION AND COMMUNICATIONS</u>					
LEVEL 1	104.7	102.0	99.9	102.0	101.7
LEVEL 2	105.4	102.0	102.3	105.0	106.5
LEVEL 3	102.5	103.9	102.2	103.4	103.0
LEVEL 4	97.5	100.1	98.8	96.5	98.5
LEVEL 5	101.1	94.6	96.9	98.6	100.0
LEVEL 6	109.4	97.5	101.6	103.4	105.4
LEVEL 7	104.6	97.8	100.4	99.0	102.7
<u>PUBLIC UTILITIES</u>					
LEVEL 1	105.7	106.7	107.2	103.3	104.0
LEVEL 2	115.5	110.4	108.4	108.2	106.2
LEVEL 3	95.3	105.1	105.7	97.6	109.6
LEVEL 4	112.0	114.7	111.4	119.2	115.7
LEVEL 5	103.0	111.9	110.4	114.3	110.4
LEVEL 6	107.0	111.8	111.8	113.3	114.3
LEVEL 7	101.1	114.0	107.0	113.0	108.0

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1981

ELECTRONICS TECHNICIANS AND TECHNOLOGISTS	1977 %	1978 %	1979 %	1980 %	1981 %
<u>TRADE</u>					
LEVEL 1	-	*	-	-	*
LEVEL 2	-	*	*	*	*
LEVEL 3	*	*	*	*	*
LEVEL 4	*	*	*	-	*
LEVEL 5	*	*	*	-	*
LEVEL 6	*	*	*	-	*
LEVEL 7	*	*	*	-	*
<u>SERVICE</u>					
LEVEL 1	*	100.2	95.3	*	*
LEVEL 2	102.2	98.6	90.2	90.3	92.2
LEVEL 3	86.8	84.1	78.6	84.4	87.3
LEVEL 4	95.8	97.6	100.4	99.0	100.0
LEVEL 5	96.1	91.1	102.0	102.3	95.3
LEVEL 6	99.4	*	*	96.6	*
LEVEL 7	-	-	-	-	-

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1981

ELECTRONICS TECHNICIAN AND TECHNOLOGIST	1977 %	1978 %	1979 %	1980 %	1981 %
LEVEL 1	50.6	51.5	49.5	55.0	53.4
LEVEL 2	57.5	59.4	59.0	60.6	59.6
LEVEL 3	71.7	73.9	73.2	73.2	69.8
LEVEL 4	78.1	76.0	75.0	74.3	74.3
LEVEL 5	88.1	91.6	89.3	87.5	87.7
LEVEL 6	96.7	101.1	99.4	96.7	93.6
LEVEL 7	109.7	107.2	113.2	109.2	107.4
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535

Source: Pay Research Bureau

TABLE 4
SURVEY COVERAGE BY CLASS - CANADA
1978 TO 1982

TECHNICAL SUPPORT (ENGIN. & SCIENT.)	1978		1979		1980		1981		1982	
	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL	NO.OF OBS.	% OF TOTAL
LEVEL 1	558	5.3	864	7.6	835	7.1	913	7.0	939	7.1
LEVEL 2	1993	18.7	1919	16.8	2033	17.3	2445	18.8	2334	17.7
LEVEL 3	3423	32.1	3487	30.5	3647	31.0	3862	29.7	3761	28.5
LEVEL 4	3521	33.0	3821	33.4	3961	33.7	4324	33.2	4540	34.4
LEVEL 5	1160	10.9	1344	11.7	1278	10.9	1469	11.3	1626	12.3
TOTAL	10665	100.0	11435	100.0	11754	100.0	13013	100.0	13200	100.0

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1978 TO 1982

TECHNICAL SUPPORT (ENGIN. & SCIENT.)	1978		1979		1980		1981		1982	
	MEAN \$		MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%
LEVEL 1	12616		13834	9.7	15156	9.6	16894	11.5	20011	18.5
LEVEL 2	15097		16003	6.0	17765	11.0	19723	11.0	22649	14.8
LEVEL 3	17880		19368	8.3	21520	11.1	24228	12.6	27245	12.5
LEVEL 4	21096		22704	7.6	25077	10.5	28340	13.0	31714	11.9
LEVEL 5	23386		25441	8.8	27899	9.7	31963	14.6	36234	13.4
	Q-3 \$		Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
LEVEL 1	13992		15156	8.3	16500	8.9	18828	14.1	22352	18.7
LEVEL 2	16663		17673	6.1	19444	10.0	21500	10.6	24939	16.0
LEVEL 3	19872		21626	8.8	24039	11.2	27231	13.3	30886	13.4
LEVEL 4	23238		24987	7.5	27963	11.9	31884	14.0	35902	12.6
LEVEL 5	25889		27573	6.5	30147	9.3	34621	14.8	39600	14.4

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

TECHNICAL SUPPORT (ENGIN. & SCIENT.)	FIVE YEAR PERIOD PERCENTAGE INCREASE <u>1978 TO 1982</u> %
LEVEL 1	58.6
LEVEL 2	50.0
LEVEL 3	52.4
LEVEL 4	50.3
LEVEL 5	54.9
	<u>1972 TO 1977</u>
TECHNICIAN, ENGINEERING	
LEVEL 1	75.7
LEVEL 2	43.2
LEVEL 3	55.0
LEVEL 4	65.0
LEVEL 5	63.6
TECHNICIAN, LABORATORY	
LEVEL 1	120.9
LEVEL 2	82.6
LEVEL 3	73.0
LEVEL 4	67.9
LEVEL 5	75.8
TECHNOLOGIST, ENGINEERING	
LEVEL 1	80.9
LEVEL 2	74.1
LEVEL 3	72.2
LEVEL 4	61.1
TECHNOLOGIST, SCIENTIFIC	
LEVEL 1	65.7
LEVEL 2	60.8
LEVEL 3	57.5
LEVEL 4	61.0

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1978 TO 1982

TECHNICAL SUPPORT (ENGIN. & SCIENT.)	1978 %	1979 %	1980 %	1981 %	1982 %
<u>ATLANTIC PROVINCES</u>					
LEVEL 1	99.8	103.7	89.4	79.7	65.4
LEVEL 2	91.5	96.0	103.2	104.4	103.5
LEVEL 3	93.2	93.5	95.0	94.5	95.2
LEVEL 4	93.9	90.4	90.7	89.6	89.3
LEVEL 5	101.3	93.8	93.4	93.6	91.7
<u>QUEBEC</u>					
LEVEL 1	90.9	94.7	100.6	101.7	95.7
LEVEL 2	94.2	96.4	96.5	96.7	93.1
LEVEL 3	99.1	97.9	99.8	101.9	98.5
LEVEL 4	98.3	99.3	101.5	101.4	100.4
LEVEL 5	98.8	101.1	103.0	103.8	100.4
<u>ONTARIO</u>					
LEVEL 1	101.7	102.4	103.4	106.0	107.4
LEVEL 2	101.2	102.6	99.4	98.7	100.6
LEVEL 3	100.4	99.4	97.0	96.0	97.0
LEVEL 4	98.6	97.6	94.4	94.0	94.6
LEVEL 5	97.0	96.4	95.4	94.0	95.1
<u>PRAIRIES</u>					
LEVEL 1	96.4	97.8	93.9	91.7	93.4
LEVEL 2	95.8	98.7	100.0	102.0	102.5
LEVEL 3	99.6	100.2	100.2	102.4	102.5
LEVEL 4	103.2	104.9	105.1	105.7	105.7
LEVEL 5	103.0	101.5	104.6	105.0	106.1
<u>BRITISH COLUMBIA</u>					
LEVEL 1	127.7	127.9	129.0	102.5	112.2
LEVEL 2	130.1	119.1	117.7	108.6	113.3
LEVEL 3	108.2	113.7	118.0	109.2	117.0
LEVEL 4	104.4	103.2	109.0	105.5	108.0
LEVEL 5	103.8	107.6	95.6	98.8	97.2

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1978 TO 1982

TECHNICAL SUPPORT (ENGIN. & SCIENT.)	1978 %	1979 %	1980 %	1981 %	1982 %
<u>MINING</u>					
LEVEL 1	111.7	105.8	110.1	104.0	108.8
LEVEL 2	100.0	102.4	103.3	106.2	111.0
LEVEL 3	98.5	99.7	98.1	101.1	101.1
LEVEL 4	93.1	97.1	98.8	99.4	99.4
LEVEL 5	94.8	97.6	103.0	101.8	100.0
<u>MANUFACTURING</u>					
LEVEL 1	100.0	99.5	102.0	104.2	103.7
LEVEL 2	97.2	99.5	99.4	99.0	99.4
LEVEL 3	97.9	99.5	96.5	96.7	96.8
LEVEL 4	95.9	97.3	96.5	95.1	95.0
LEVEL 5	99.8	98.1	98.5	97.6	99.2
<u>TRANSPORTATION & COMMUNICATION</u>					
LEVEL 1	*	*	*	*	-
LEVEL 2	101.3	100.2	101.5	109.6	104.4
LEVEL 3	106.2	107.0	105.9	107.3	109.2
LEVEL 4	109.5	109.4	107.7	108.0	108.1
LEVEL 5	102.2	101.8	102.1	102.2	99.8
<u>PUBLIC UTILITIES</u>					
LEVEL 1	111.7	111.1	117.1	109.5	113.6
LEVEL 2	113.1	105.0	105.4	102.2	104.2
LEVEL 3	109.0	107.5	110.0	105.7	107.7
LEVEL 4	109.5	108.7	114.1	111.7	111.5
LEVEL 5	104.5	103.3	103.3	102.7	103.2
<u>SERVICE</u>					
LEVEL 1	87.7	95.6	93.7	89.4	87.6
LEVEL 2	84.2	94.4	95.3	95.4	93.3
LEVEL 3	87.0	93.0	89.0	92.6	90.4
LEVEL 4	92.6	93.7	93.0	95.0	96.5
LEVEL 5	99.5	100.8	99.3	101.3	100.4

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1978 TO 1982

TECHNICAL SUPPORT (ENGIN. & SCIENT.)	1978 %	1979 %	1980 %	1981 %	1982 %
LEVEL 1	53.3	53.5	53.0	52.0	54.9
LEVEL 2	63.8	61.8	62.2	60.6	62.1
LEVEL 3	75.6	74.8	75.3	74.5	74.7
LEVEL 4	89.2	87.7	87.7	87.1	87.0
LEVEL 5	98.9	98.3	97.6	98.2	99.4
MEAN RATE ENGINEER 3	\$23647	\$25878	\$28580	\$32535	\$36463

SECTION 5
OPERATIONAL CLASSES

Operational Classes

In analysing the data presented in this section, users should be aware of the following factors:

- i) Several classes included in the 1972 to 1977 report are not published in this report: Cleaner, Industrial Plant; Material Handler, General; Meter Reader.
- ii) The survey of Firefighters was changed in 1981 from the Wage Rate Survey to a Pay Research Bureau survey. With the change-over in coverage, and the method of surveying, it was felt that the presentation of trend information would not be accurate.
- iii) In 1981, the Police Constable sample of participating organizations was reduced. From 1981 only police forces in municipalities with a population of 50,000 or more were surveyed. Further, also from 1981, only information on First Class Constables was collected, whereas up to 1980 data on all Constables were reported. Because of these changes it was decided not to include this class.
- iv) Data for Stationary Engineer, formerly based on the Wage Rate Survey, are based on the Bureau's Automated Pay Survey Program for the 1977 to 1982 period in this report.

Trends in Survey Coverage

<u>CLASS</u>	Percentage Increases (Decreases)	
	No. of	No. of
	Orgs. <u>%</u>	Empls. <u>%</u>
CARPENTER MAINTENANCE (1977 - 1982)	(6.2)	(0.8)
ELECTRICAL REPAIRER (1977 - 1982)	(7.0)	3.2
LABOURER, NON-PRODUCTION (1977 - 1982)	(5.6)	(19.3)
STATIONARY ENGINEER (1977 - 1982)	(2.6)	(0.1)

TABLE I
SURVEY COVERAGE BY CLASS - CANADA
1977 TO 1982

OPERATIONAL CLASSES	1977		1978		1979		1980		1981		1982	
	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.	NO.OF ORGS.	NO.OF EMPL.
CARPENTER, MAINTENANCE(2)	1817	5670	1869	6393	1853	6404	1848	6227	1746	6043	1705	5623
ELECTRICAL REPAIRER(2)	2247	15624	2090	15548	2112	15476	2170	15987	2117	16380	2090	16124
LABOURER, NON-PRODUCTION(1)	90	12622	90	12716	85	10565	85	11947	81	10012	85	10180
STATIONARY ENGINEER(1)	76	738	77	829	79	740	76	766	73	790	74	737

Sources: (1) Pay Research Bureau Automated Pay Survey Program and
(2) 100% Universe, based on data from Wage Rate Survey, Department of Labour.

TABLE 2
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR REGIONS
1977 TO 1982

OPERATIONAL CLASSES	<u>ATLANTIC PROVINCES</u>						<u>QUEBEC</u>					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE	11.0	10.4	10.2	11.2	10.6	10.2	30.6	30.3	30.0	32.8	30.9	29.1
ELECTRICAL REPAIRER	7.3	7.5	7.9	7.6	7.3	9.0	27.6	27.2	27.3	28.1	29.2	26.2
LABOURER, NON-PRODUCTION	5.2	6.5	8.5	9.2	9.1	9.7	28.6	25.1	24.4	26.2	28.8	23.2
STATIONARY ENGINEER	19.9	14.8	15.4	26.8	27.2	28.5	23.7	20.6	17.2	15.9	20.9	20.2
	<u>ONTARIO</u>						<u>PRAIRIES</u>					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE	32.6	31.2	33.0	32.3	32.9	32.7	11.9	13.9	14.6	10.5	12.0	15.5
ELECTRICAL REPAIRER	46.3	44.8	45.7	45.2	44.4	44.3	9.6	10.1	10.1	9.9	10.6	11.9
LABOURER, NON-PRODUCTION	39.1	43.6	39.8	35.5	36.6	38.9	19.6	20.8	20.6	23.0	17.6	21.6
STATIONARY ENGINEER	35.1	37.9	37.6	31.5	26.3	23.1	15.5	20.3	18.2	18.8	13.2	20.2
	<u>BRITISH COLUMBIA</u>											
	1977	1978	1979	1980	1981	1982						
	%	%	%	%	%	%						
CARPENTER, MAINTENANCE	13.9	14.2	12.2	13.2	13.6	12.5						
ELECTRICAL REPAIRER	9.2	10.4	9.0	9.2	8.5	8.6						
LABOURER, NON-PRODUCTION	7.5	4.0	6.7	6.1	7.9	6.6						
STATIONARY ENGINEER	5.8	6.4	11.6	7.0	12.4	8.0						

Sources: (1) Pay Research Bureau Automated Pay Survey Program and
(2) 100% Universe, based on data from Wage Rate Survey, Department of Labour.

TABLE 3
SURVEY COVERAGE BY CLASS
PERCENTAGE DISTRIBUTION - MAJOR INDUSTRIES
1977 TO 1982

OPERATIONAL CLASSES	MINING						MANUFACTURING					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE	10.6	8.7	9.6	10.1	11.1	8.7	45.2	46.4	46.5	43.9	45.7	41.2
ELECTRICAL REPAIRER	13.6	12.8	14.9	13.6	14.2	13.5	57.7	58.6	56.0	57.6	57.4	57.9
LABOURER, NON-PRODUCTION	5.8	4.0	5.2	13.1	10.9	9.2	19.7	18.6	18.8	17.3	18.4	16.7
STATIONARY ENGINEER	13.7	11.1	8.2	8.7	6.3	7.2	50.8	57.3	52.3	48.8	38.6	31.9
	TRANSPORTATION AND COMMUNICATIONS						PUBLIC UTILITIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE(a)	18.3	19.7	17.0	18.0	16.9	21.5	(a)	(a)	(a)	(a)	(a)	(a)
ELECTRICAL REPAIRER(a)	20.2	20.1	20.0	20.1	20.6	21.0	(a)	(a)	(a)	(a)	(a)	(a)
LABOURER, NON-PRODUCTION	31.3	31.0	25.4	25.6	29.5	27.3	3.8	9.6	10.1	7.9	10.7	10.5
STATIONARY ENGINEER	1.9	4.2	4.6	4.6	4.8	6.8	20.6	12.3	13.1	24.8	29.5	32.3
	FINANCE AND INSURANCE						TRADE					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER MAINTENANCE	-	-	0.5	0.4	0.4	0.6	7.6	8.3	7.6	8.7	7.0	7.1
ELECTRICAL REPAIRER	-	-	(b)	(b)	(b)	(b)	3.0	2.6	2.7	3.0	2.4	2.4
LABOURER, NON-PRODUCTION	0.3	0.3	0.4	0.1	0.3	0.3	2.2	2.3	2.6	0.8	0.3	2.5
STATIONARY ENGINEER	2.4	2.2	2.3	1.7	1.4	1.5	1.9	1.7	1.8	1.2	0.5	0.7
	MUNICIPAL GOVERNMENT						SERVICE					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE	9.5	9.0	9.2	9.9	8.0	8.9	8.8	7.9	9.6	9.0	10.9	12.0
ELECTRICAL REPAIRER	2.2	3.9	2.6	2.7	1.8	2.1	3.3	2.0	3.8	3.0	3.6	3.1
LABOURER, NON-PRODUCTION(b)	(b)	(b)	(b)	(b)	(b)	(b)	36.9	34.2	37.5	35.2	29.9	33.5
STATIONARY ENGINEER(b)	(b)	(b)	(b)	(b)	(b)	(b)	8.7	11.2	17.7	10.2	18.9	19.6

(a) Transportation, Communications and Public Utilities combined

(b) Service and Municipal Government combined

Sources: (1) Pay Research Bureau Automated Pay Survey Program and

(2) 100% Universe, based on data from Wage Rate Survey, Department of Labour.

TABLE 5
MEAN AND THIRD QUARTILE ANNUAL RATES OF PAY - CANADA
1977 TO 1982

OPERATIONAL CLASSES	1977	1978		1979		1980		1981		1982	
	MEAN \$	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%	MEAN \$	%
CARPENTER, MAINTENANCE	15223	16085	5.7	17423	8.3	19230	10.4	21530	12.0	24379	13.2
ELECTRICAL REPAIRER	16705	17800	6.6	19382	8.9	21467	10.8	24197	12.7	27301	12.8
LABOURER, NON-PRODUCTION	11857	12639	6.6	13835	9.5	15584	12.6	17197	10.4	20321	18.2
STATIONARY ENGINEER	16436	18000	9.5	19445	8.0	21625	11.2	23767	9.9	26736	12.5
	Q-3 \$	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%	Q-3 \$	%
CARPENTER MAINTENANCE	17740	18533	4.5	20140	8.7	21956	9.0	25211	14.8	28092	11.4
ELECTRICAL REPAIRER	18804	19758	5.1	21538	9.0	23792	10.5	27215	14.4	30387	11.7
LABOURER, NON-PRODUCTION	12674	13376	5.5	15593	16.6	16779	7.6	18624	11.0	21881	17.5
STATIONARY ENGINEER	17129	19302	12.6	21316	10.4	23724	11.3	25951	9.4	28995	11.7

% represents percentage increase over previous year.

TABLE 6
TRENDS IN MEAN ANNUAL RATES OF PAY - CANADA
1972 TO 1982

OPERATIONAL CLASSES INCREASE	FIVE YEAR PERIOD PERCENTAGE INCREASE		TEN YEAR PERIOD PERCENTAGE
	<u>1972 TO 1977</u> %	<u>1977 TO 1982</u> %	<u>1972 TO 1982</u> %
CARPENTER, MAINTENANCE	78.7(2)	60.1(2)	186.1(2)
ELECTRICAL REPAIRER	72.5(2)	63.4(2)	181.9(2)
LABOURER, NON-PRODUCTION	65.8(1)	71.4(1)	184.2(1)
STATIONARY ENGINEER	74.9(2)	62.7(1)	-

Sources: (1) Pay Research Bureau Automated Pay Survey Program and
(2) 100% Universe, based on data from Wage Rate Survey, Department of
Labour.

TABLE 7
REGIONAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA MEAN = 100%
1977 TO 1982

OPERATIONAL CLASSES	ATLANTIC PROVINCES						QUEBEC					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE	87.1	86.9	86.8	87.9	84.8	90.8	93.5	94.5	94.2	95.9	95.0	93.7
ELECTRICAL REPAIRER	92.8	91.5	90.7	94.6	92.2	92.8	94.6	94.7	95.5	95.0	94.8	95.0
LABOURER, NON-PRODUCTION	91.0	95.5	95.3	99.0	99.8	95.5	97.0	98.3	89.1	93.2	90.4	97.2
STATIONARY ENGINEER	98.9	98.5	92.8	92.7	93.2	90.4	91.5	92.3	88.4	91.4	92.5	95.1
	ONTARIO						PRAIRIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE	99.5	99.6	99.9	98.8	99.3	97.8	102.5	100.9	103.4	100.5	98.4	101.8
ELECTRICAL REPAIRER	101.4	101.6	100.7	100.5	100.7	99.1	99.2	97.6	102.3	101.8	102.0	106.4
LABOURER, NON-PRODUCTION	101.8	102.7	107.1	105.9	106.6	102.6	99.4	97.3	100.6	98.4	97.9	99.2
STATIONARY ENGINEER	103.6	104.0	105.0	108.7	108.3	107.4	98.3	98.1	103.5	102.6	103.9	107.5
	BRITISH COLUMBIA											
	1977	1978	1979	1980	1981	1982						
	%	%	%	%	%	%						
CARPENTER, MAINTENANCE	123.4	121.4	121.3	123.0	126.4	125.9						
ELECTRICAL REPAIRER	115.6	115.2	115.8	115.5	118.4	118.9						
LABOURER, NON-PRODUCTION	110.0	103.1	101.6	102.8	109.6	105.5						
STATIONARY ENGINEER	121.4	110.0	105.1	101.0	105.9	106.2						

Sources: (1) Pay Research Bureau Automated Pay Survey Program and

(2) 100% Universe, based on data from Wage Rate Survey, Department of Labour.

TABLE 8
INDUSTRIAL DIFFERENTIALS IN MEAN RATES OF PAY
CANADA ALL INDUSTRY MEAN = 100%
1977 TO 1982

OPERATIONAL CLASSES	MINING						MANUFACTURING					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE	106.1	-	108.4	114.3	114.7	111.9	102.6	-	102.6	114.4	101.5	103.8
ELECTRICAL REPAIRER	100.5	-	101.4	98.7	104.9	104.3	102.1	-	101.9	91.7	102.6	101.6
LABOURER, NON-PRODUCTION	112.8	111.3	113.0	105.6	100.6	104.6	104.9	107.0	112.0	110.0	112.2	107.1
STATIONARY ENGINEER	106.2	101.2	99.4	98.5	102.7	106.2	100.0	100.6	103.9	103.9	105.5	104.6
	TRANSPORT AND COMMUNICATIONS						PUBLIC UTILITIES					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE(a)	99.0	-	98.8	106.8	95.3	96.9	(a)	-	(a)	(a)	(a)	(a)
ELECTRICAL REPAIRER(a)	96.5	-	97.1	88.8	93.2	96.1	(a)	-	(a)	(a)	(a)	(a)
LABOURER, NON-PRODUCTION	91.8	88.4	93.4	93.2	95.3	95.4	100.2	111.8	112.4	113.2	109.3	104.3
STATIONARY ENGINEER	97.3	101.8	99.9	108.1	104.3	103.4	99.2	101.3	95.4	94.2	94.0	90.9
	TRADE						FINANCE AND INSURANCE					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE	88.2	-	88.6	93.5	88.5	87.7	-	-	81.2	*	78.9	96.6
ELECTRICAL REPAIRER	85.6	-	86.3	82.0	88.1	87.3	-	-	67.6	71.6	*	86.1
LABOURER, NON-PRODUCTION	84.0	83.7	81.1	75.9	*	69.7	84.8	82.8	85.0	*	*	*
STATIONARY ENGINEER	*	*	*	*	*	*	99.8	96.4	99.5	95.5	97.5	97.1
	SERVICE						MUNICIPAL GOVERNMENT					
	1977	1978	1979	1980	1981	1982	1977	1978	1979	1980	1981	1982
	%	%	%	%	%	%	%	%	%	%	%	%
CARPENTER, MAINTENANCE	93.9	-	91.5	99.5	93.5	90.8	97.8	-	99.4	108.4	100.9	91.2
ELECTRICAL REPAIRER	99.3	-	92.0	79.8	89.1	100.4	94.6	-	98.4	88.8	92.7	94.3
LABOURER, NON-PRODUCTION(b)	103.4	103.2	94.8	95.7	94.1	100.0	(b)	(b)	(b)	(b)	(b)	(b)
STATIONARY ENGINEER(b)	93.0	95.0	95.9	94.1	96.3	104.4	(b)	(b)	(b)	(b)	(b)	(b)

(a) Transportation, Communications and Public Utilities combined

(b) Service and Municipal Government combined

Sources: (1) Pay Research Bureau Automated Pay Survey Program and

(2) 100% Universe, based on data from Wage Rate Survey, Department of Labour.

TABLE 9
OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY
ENGINEER 3 = 100%
1977 TO 1982

OPERATIONAL CLASSES	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %
CARPENTER, MAINTENANCE	68.6	68.0	67.3	67.3	66.2	66.9
ELECTRICAL REPAIRER	75.3	75.3	74.9	75.1	74.4	74.9
LABOURER, NON-PRODUCTION	53.4	53.4	53.5	54.5	52.9	55.7
STATIONARY ENGINEER	74.0	76.1	75.1	75.7	73.1	73.3
MEAN RATE ENGINEER 3	\$22196	\$23647	\$25878	\$28580	\$32535	\$36463

Sources: (1) Pay Research Bureau Automated Pay Survey Program and
(2) 100% Universe, based on data from Wage Rate Survey, Department of
Labour.



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